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AGES OF THE WORLD (Primitive and American).—1. The conception of a series of cosmic eras, mutually related, yet separated from each other by cataclysms destroying the entire known world and forming the basis for an essentially new creation, is peculiar to a high degree of religious development. The idea of creation is common to practically all religious systems (see art. COSMOGENY), and at a later, though still relatively primitive, period is evolved the notion of a cosmic cataclysm which is to annihilate the world. Still later, it would seem, comes the doctrine that after this cosmic annihilation there is to be a new world, a belief which is found, for instance, in systems so divergent as the Iranian and the Norse. Closely connected with the belief in the regeneration of the world is the well-nigh universal doctrine that the entire earth has already been destroyed by a flood (see DELUGE). The theory of Ages of the World has been carried still further by the phase which holds that the present cosmic era has been preceded by others, and the Greek, Hindu, and Buddhist systems have even evolved a series of cycles each of which contains four Ages, and which have been and are to be repeated in infinite succession.

2. The most familiar example of the belief in Ages of the World is, of course, the philosophized Greek view presented by Hesiod (*Works and Days*, 109–201), according to whom there have been four Ages—golden, silver, brass, and iron—each worse than the one preceding. Equally pessimistic is the Hindu system of Ages, where the four *yugas*, or Ages of a 'day of Brahma' (12,000 years), are successively shorter in duration and increasingly degenerate. Among primitive peoples such a series of Ages of the World seems to be unknown, yet it is noteworthy that among the South American Indians it is generally held that the world has already been destroyed twice, once by fire and again by flood, as among the eastern Tupis and the Arawaks of Guiana. In like manner, the ancient Peruvians fancied not only that two cosmic cataclysms had occurred, but that the world was again to be destroyed, so that they stood in terror of every lunar and solar eclipse.

3. Outside the great culture nations of Asia, Northern Africa, and Europe, however, only the Aztecs of ancient Mexico, perhaps under the influence of the still more highly developed Mayas of Yucatan, evolved a doctrine of Ages of the World. This marvellous people held that the present era, which bore no special name, was preceded by four Ages or 'Suns': the Sun of Earth, the Sun of Fire, the Sun of Air, and the Sun of Water. Each of these cycles had been terminated by a fearful and universal cataclysm, and the Aztecs looked forward with dread to the end of the present era. At the close of each cycle of fifty-two years they were filled with special fear; every fire was extinguished, and all the priests, followed by the people, marched in solemn procession to a mountain two leagues from the capital. There they watched with bated breath for the rising of the Pleiades, and when this constellation was seen, the priests rekindled fires by the friction of two

pieces of wood, one of which was placed on the breast of a human sacrifice, while the multitude rejoiced in the assurance that the world would surely survive for another cycle of fifty-two years. It is noteworthy that Aztec sources vary widely with regard to both the length and the sequence of the cosmic eras, the latter being given not only as stated above, but also as Water, Air, Fire, Earth; Earth, Air, Fire, Water; Water, Earth, Air, Fire; and Water, Air, Earth, Fire. In like manner, the order of the cataclysms which terminated the several eras varies according to the different sources, but it is certain at least that the Sun of Earth was terminated by famine, the Sun of Fire by conflagration, the Sun of Air by a hurricane, and the Sun of Water by a flood.

4. The basis of this Aztec belief in Ages of the World is not altogether certain. It has been suggested that it was due, at least in part, to the tremendous natural phenomena of a tropical country, and also to the political and social revolutions which took place in ancient Mexico. The former explanation is doubtless the one to be preferred, implying a reminiscence of some remote catastrophe, mythopoetically magnified by successive generations, especially as this hypothesis also explains the characteristic South American belief in a twofold destruction of the world by fire and flood.

LITERATURE.—Watz, *Anthropologie der Naturvölker*, iv. 161–168 (Leipzig, 1864); Brinton, *Myths of the New World*, pp. 229–238 (New York, 1878); Réville, *Native Religions of Mexico and Peru*, pp. 113–118 (London, 1884); Ehrenreich, *Mythen und Legenden der südamer. Urvölker*, pp. 30–31 (Berlin, 1906).

LOUIS H. GRAY.

AGES OF THE WORLD (Babylonian).—Even before the discovery of the cuneiform inscriptions, it was known that the Babylonians had reflected on the course of the world's history, and that they regulated the Ages of the World according to the movements of the planets. Seneca^{*} reports a statement of Berosus, who under the rule of the Seleucids was priest in the Marduk temple of Babylon, and whose lost historical work *Chaldaica* was intended to prove the commencement of a new world period under the Seleucids or under Alexander.

Berosus says that everything takes place according to the course of the planets, and he maintains this so confidently that he determines the times for the conflagration of the world and for the flood. He asserts that the world will burn when all the planets which now move in different courses come together in the Crab,^t so that they all stand in a straight line in the same sign, and that the future flood will take place when the same conjunction occurs in Capricorn. For the former is the constellation of the summer solstice, the latter of the winter solstice; they are the decisive signs of the zodiac, because the turning-points of the year lie in them.[†]

These accounts of Berosus have here, as well as in the narratives of the Creation and the Flood, been proved thoroughly reliable. The teaching which underlies them regarding the course of the world corresponds to the accounts which we can read from the cuneiform inscriptions.

^{*} *Fragm. Hist. Græc.* ii. 60.

^t The sign of the Crab in the zodiac is the turning-point of the summer sun, if the vernal equinox lies in the Ram; the corresponding turning-point of the winter sun is Capricorn. Our calendar has retained the designations, although the vernal equinox has long ago moved into the Fish.

The Babylonian doctrine, which we find popularized in myths, dramatic and festive customs, and games, inquires into the origin of things and the development of the world from its beginnings in chaos to its renewal in future eras. The doctrine has spread over the whole world. We find it again in Egypt, in the religion of the Avesta, and in India; traces of it are discovered in China, as well as in Mexico and among the savage nations of South America. To refer these phenomena back to 'elementary ideas' (Bastian, *Völkeridee*), such as may arise independently among different peoples, will not hold good in view of the circumstance that we have to do with ideas connected with definite facts which rest on continued astronomical observations. Babylonia was, moreover, according to a constant tradition, the home of astronomy ('Chaldean wisdom'), and there the science of the stars formed the basis of all intellectual culture.

In the Babylonian conception of the universe, which regards everything earthly as a copy of a heavenly prototype, the zodiac is considered the most important part of the whole universe. The zodiac (*Supuk samē*) is the broad 'Way' on the heavens, c. 20 degrees, upon which the sun, the moon, Venus and the four other moving stars (planets) known to antiquity, trace out their course; while the other stars, the fixed stars, seem to stand still on the ball of the revolving heavens. The moving stars were regarded as interpreters of the Divine will. The heaven of fixed stars was related to them like a commentary written on the margin of a book of revelation.

The rulers of the zodiac are the sun, the moon, and Venus. In a mythological text (*WAI*. iv. pl. 5) we are told that Bel placed them to rule the *Supuk samē*. The four remaining planets, Marduk-Jupiter, Nebo-Mercury, Ninib-Mars, and Nergal-Saturn, correspond to the quarter appearances of the three, and have their special place of revelation at the four quarter points of the cycle, or, speaking in terms of space, at the four corners of the world. Every one of the astral divinities represents the whole Divine power. Polytheism rests on myth, which popularizes the teaching, and on worship, which again is a product of the mythology. The temple-teaching at every place of worship serves to prove that the divinity reveals itself at a particular place in a definite form and shape, such as result from the relation of that place to the corresponding sacred region of the heavens (*rōros, templum*). The local god is *summus deus* for the region; the other gods are like wonder-working saints.

Seeing, however, that the Divine power reveals itself in the zodiac, the theory involves a triadic conception of the godhead. The triad—sun, moon, and Venus—in their relation to each other, as well as each of these three bodies individually, comprehends the whole being of the godhead. In the case of every mythological phenomenon, the question must be raised whether the divinity in the particular place or in the expression of its worship stands for the sun, the moon, or the Venus-(Istar-)character. In each case, however, the deity represents at the same time the whole cycle, which repeats its phenomena in every microcosm of the natural world. The same is true of Marduk, Nebo, Ninib, and Nergal. In the teaching of Babylon, which is best known to us, the chief points in the sun's track belong to them in a special sense as well as the quarter appearances of the sun's course. They can thus be designated sun-gods, but they can equally well be represented as forms of the moon or of Venus as they appear in their course. In like manner, they are representatives of the course of the cycle of nature (Tammuz in the upper and under world), which

runs parallel with the astral phenomena in the changes of the year. Marduk and Nebo as the embodiments of the spring and harvest phenomena, or Ninib and Nergal as the embodiments of the phenomena of summer and winter, could occupy the place of Tammuz in both halves of his cycle.

The Babylonian sages reached the profound conception that time and space are identical.* Both are revelations of the Divine power, and have therefore the same principles of division.

The course of the world cycle is consummated in the struggle of the two powers of the world system, light and darkness, the upper and the under world, the summer of the world and the winter of the world. In the myths the sun and the moon are the combatants. The moon is, according to the Babylonian teaching, the star of the upper world (the reverse holds in Egypt). She dies and rises again from the dead (*inbu sa ina rammanita ibbanā*, 'fruit, which produces itself out of itself'); she symbolizes the power of life from the dead. The sun, which, in opposition to the moon, stands at the low point, and in which the stars disappear, is the power of the under world. 'Istar desires to become the queen of heaven.' In the myth she is the heavenly virgin (in the zodiac she is represented by the figure of the Virgin with the ear of corn or with the child) who gives birth to the sun-child or the moon-child, which then overcomes the dragon of darkness and thereby brings in the new era,—but then at the highest point of the course dies and sinks down into the under world; or she is the Venus, who descends into the under world and brings up the fallen ones. The four planets of the four points of the world, which indicate in the gyration the turning-points of the sun (Ninib and Nergal) and the equinoctial points (Marduk and Nebo), are made use of in the mythology in the following manner: Marduk is the bringer in of the new time (the spring sun), Nebo (Hermes with the balance of the dead) is the guide to the dark half of the lower world, Ninib (Mars) brings the doom of the change of the summer sun (death of Tammuz by the boar, the sacred animal of Ninib), Nergal is lord of the dark half of the under world. Thus Marduk and Nebo exchange places under the precedence of Babylon, whose local god is Marduk. The rôle of bringing in the new time belongs in reality to Nebo. His name indicates that he is the 'prophet' of the new time (Nebo-Mercury is the morning-star; in the word lies the root of the official name *nebt*, 'prophet,' i.e. one who announces the new age).†

The change of the arc of day and the arc of night, the summer and winter courses of the stars, and the related change of life and death in nature, result in the doctrine of the *change of the Ages*. The change of the seasons corresponds to the succession of day and night. According to the principle that the microcosm everywhere reflects the macrocosm, the year is a copy of the greater period of time, in which the evolution of the world is consummated, and the seasons correspond to Ages of the World.

The acceptance of Ages of the World must go back to the observation of the stages of the sun's course. Before we speak of these Sun Ages of the World, we shall give a survey of traces of Ages of the World in which the connexion with these stages is not at first apparent.

The cuneiform texts mention 'kings before the Flood' in opposition to 'kings after the Flood.' They are thought of as in past time:—

* The Assyr.-Bab. *dām*, 'world,' is the Heb. *ādm*, 'primeval time,' 'eternity.'

† Jupiter, as a planet, has in itself no claim to special emphasis. In our order of the days of the week it occupies the fifth place (Thursday, Jeudi, Jovis dies). The fact that the classical peoples raise him to the rank of *summus deus* is an indication of the wide diffusion of the Babylonian conception of the world.

1. *Lam abūbi*, 'the time before the Flood.' In the time before the Flood there lived the heroes, who (according to the Gilgames Epic, which on the 11th table tells the story of the Flood) dwell in the under world, or, like the Babylonian Noah, are removed into the heavenly world. At that time there lived, too, the (seven) sages. Asurbanipal speaks of inscriptions of the time before the Flood. A magical text mentions a saying of an old sage before the Flood. *WAI*.v. 44, 20a, speaks of 'kings after the Flood.' Berosus indicates along with the sages the early kings, who together lived 120 years.

1. Aloros (= Bab. *Aruru*?).
2. Alaporos (Adaporos)=*adapa*, i.e. Marduk, the son of Ea in the heroic age, who, as the bringer in of the new age (cf. 'As̄āru muλλāw'), Marduk as fighting with the dragon, will introduce the new age of the world.*
3. Amelion=*amēlu*, 'man.' As Adapa corresponds to the Biblical patriarch Seth, Amelion in like manner corresponds to Enoch (i.e. man).
4. Ammenon=*ummdna* ('workmaster')= Cain (Cainan), 'smith' (cf. Aram. *qaśindya*= 'smith').
5. Megalaros=?.
6. Daunos=?.
7. Evedorachos=*Enmeduranki*, 'favourite of the great gods,' who taught his son the secret of heaven and earth; i.e. Enoch, who walked with God, and after a life of 365 years (the number of the sun) was taken away. The Jewish feast of the turning of the winter sun (*Hdnukkah*, 'feast,' later applied to the dedication of the Temple) was connected with Enoch. Jubilees (42^a) says of him: 'Enoch was among the angels of God six jubilees; and they showed him all that the rule of the sun is in heaven and on the earth, and he wrote it all down.'
8. Amempeinos=*amel-Sin*, 'man of the god Sin'=Methusalem. There is a Babylonian text which communicates 'the secrets' of Amel-Sin.
9. Odartes (Opertes?)=*Ubāra-Tutu*, father of the Babylonian Noah (Utnaptilim, Hasisatra, in Berosus *Xisuthros*).

Berosus relates that Kronos before the Flood had ordered Xisuthros to engrave with letter-signs all things according to their beginning, middle, and end (engraving on tablets with cuneiform letters is meant), and to deposit them in Sippar. After the Flood his children and relatives had gone to Babylon, taken the writings from Sippar, and circulated them among the people.

2. The historic period, which again unfolds itself in Ages. The division of the Ages into periods before and after the Flood is also connected with the course of the stars. The Golden Age of early times corresponds to the time in which the vernal equinox in the zodiac goes through the dominion of Anu (four figures). The Flood brought the course of the world through the dominion of Ea (four figures, water-region); the historical period corresponds with Bel's realm of the zodiac. For the track of the zodiac is portioned out to Anu, Bel, and Ea, the triad of Divine power in the whole universe of space, corresponding on the zodiac to Sin, Samaš, and Istar. The restoration of the world after the Flood corresponds to the fashioning of the world after the original chaos, which also appears as the power of the waters (in the myth the water-dragon had been subdued); the world after the Flood corresponds to the primeval world after the Creation.†

The application of Ages of the World to the periods of the evolution of the *eon* of mankind is connected in a special way with the teaching about

* Marduk and Adapa are both *abkallu*, i.e. 'sages' in the Divine sense. Sennacherib, who, by the destruction of Babylon and the raising of Nineveh into prominence by violent means, sought to inaugurate a new era, allows himself to be glorified as Adapa. He says (K. 270, 1a): 'Assur spoke in a dream to the grandfather of the king, my lord "abkallu": "the king, the king of kings (Asurbanipal), is the grandson of the *abkallu* and Adapa." See p. 186^b for the inauguration of a new Age with Asurbanipal.

† The Biblical story of the Flood still shows traces of the notion found in the Babylonian narrative of the flooding of the whole world. The mountain where the ark landed is originally the mountain of the world. The report of the Priests' Code (Gn 8u. 12) gives the precise height of the mountain. On its top stands the tree of life (olive tree) from which the dove brings the leaf. The ark of the Indian Flood also lands on the mountain of the world.

the calendar, which is based on observation of the precession of the equinoxes.

By the precession of the equinoxes is meant the gradual displacement of the same point of day in the ecliptic, the middle line of the zodiac, which the sun's track marks out. The inclination of the axis of the earth to the plane of the sun is variable. In accordance with this, the point of intersection of the apparent plane of the sun and of the equator recedes for the spectator. For the observation of the ancients this resulted in the following phenomenon: The position of the sun in the same spring days recedes from year to year farther towards the east. In 72 years the displacement amounts to a day, in every 2200 years therefore, about a figure in the zodiac. The vernal equinox traverses once in 12×2200 years the water-region (Flood) and the fire-region. On this fact rests the teaching of Berosus given above (p. 183^a).

In the region of further Asia, the earliest historical time of which we can find traces in the original sources had placed the cult of the god of the moon in the forefront. Sargon says, in his State inscription of the king of Meluhha, that his fathers had, from distant times, since the *eon* of the moon-god (*Adi Nannar*), sent no more messengers to his predecessors. In the scheme of the partition of the world between the moon and the sun (moon=star of the upper world, sun=the star of the under world; see above, p. 184^b), Nebo would, in the pre-Babylonian order, correspond to the moon, Marduk to the sun. Nebo, too, in accordance with his character, is the 'prophet'; and, according to the nature of the doctrine regarding him, also the victor over the power of darkness, the bearer of the tablets of fate. Under the influence of the supremacy of Babylon he has exchanged his rôle with Marduk; and this, by the way, agrees with the principle of the Babylonian doctrine, according to which opposites pass over into one another (east and west, south and north, summer and winter, day and night, exchange their rôles). We could thus speak of an *Age of the moon* or an *Age of Nebo*, to which in the epoch of the supremacy of Babylon an *Age of the sun* or an *Age of Marduk* would correspond. But if there was a theory which reckoned in this way, still the latter is at least subsequently regarded as the *Age of the moon*; i.e. the Nebo Age, which preceded the rule of Marduk of Babylon, has been transposed in the teaching of the calendar, which was reckoned according to the precession.

(a) *Age of the Twins*.—In the Age before the rise of Babylon (about B.C. 5000–2800) the sun stood in the zodiacal sign called the Twins. If we were to make additional use of this circumstance in the theory of the Ages of the World, as we are inclined to do, the two phases of the waxing and waning moon would in harmony with it correspond to these twins. The moon also is called repeatedly *ellamone*, i.e. 'twins'; and the hieroglyphics of the zodiac, which even to-day indicate the Twins in the calendar, consist of the picture of the waxing and waning moon, just as the Romans represented Janus, who bears the character of the moon, as the two half-moons with human faces.

This *Age of the Twins* was for Babylon the age of the settlement of the Semitic Babylonians.

The Twins (*Dioscuri*) thus supply the ruling motive for all the myths which indicate the beginning of a new epoch (Cyrus, Cambyses, Romulus, Remus, etc.). And if any one in the time of the Assyrian predominance wished to dispose of the claims of Babylon, he went back to the archaic form of calculation. Either Nebo was deliberately raised to a more prominent place than Marduk, or (e.g., under Sargon) Sivan, the month of the moon-god, was regarded as the first month of the year. In the same way the Roman calendar was made archaic by beginning the year with Janus (January), although the last month was called December (i.e. the tenth month).

One would expect an Age of the sun to follow an Age of the moon (the sun and the moon are also twins). As a matter of fact, the reckoning of the calendar, which was changed about B.C. 2800, on the basis of the precession into the next figure of the zodiac, was so adjusted that in the zodiac the figure of the Bull followed the Twins.

(b) *Age of the Bull*.—This reform of the calendar was assisted by the actual state of affairs. The time of its introduction corresponds with the period in which Babylon became the metropolis of the world. Marduk, the god of the city of Babylon, the 'farmer of Babylon' (Nebuchadrezzar calls himself *Ikkaru ŋa Babil*, as representative of the god on earth), is symbolized by the bull, which corresponds to the figure of the Bull in the heavens.* In this way the Age of the sun came at the same time to its rights, for Marduk as the representative of the Divine power is in an especial sense the sun-god. Hammurabi took advantage of the reform of the calendar to glorify his rule as a new epoch of the world. He says that he has succeeded in 'exalting Marduk.' The priests of Babylon celebrate Marduk as the fighter with the dragon and as the demiurge, and found the claim of Babylon to world empire on the rôle of Marduk as creator of the world. The honour which belonged to Nebo as the lord of the destinies is transferred to Marduk. He determines on New Year's day the fate of the world. Nebo, who in the older teaching carried the tablets of fate, is now recorder of the destinies.

The calendar which corresponded to the Age of the Bull must have reckoned the beginning of the year a month earlier, so that the year began with Iyyar and closed with Nisan; for the world-epoch embracing a sign of the zodiac corresponds to the course of the sun through a sign of the zodiac, i.e. one month. That it was so reckoned can, of course, be proved only indirectly. The king of Assyria allowed himself to be invested in office in the month Iyyar. The investiture is a ceremony which took place also in Babylon, and therefore according to Babylonian law. The king seized the hands of Bel-Marduk, and by this act his rule obtained its ratification and consecration. This inauguration was still observed in Iyyar after Nisan must have long been regarded as the first month. Under Sargon and Nebuchadrezzar the inauguration took place in Nisan. The new calendar had thus in the meantime secured recognition for its claims.

The mythological motives of the Age of the Bull had to be taken from the myths of Marduk. Seeing that Marduk is regarded as the child of the sun (the ideogram signifies 'son of the sun'), the motive of the mysterious birth is connected with his appearance as well as the motive of the persecution by the dragon (exposure and rescue). The myths of Marduk which are as yet known have not supplied evidence for his birth from the virgin queen of heaven (see above, p. 184^b). But the myths tell of the marriage of Marduk. The child of the sun in the course of the cycle becomes the lover and the husband of the queen of heaven (Istar). Every historical celebrity who, in the Bull age, was distinguished as a ruler of the world, a founder of dynasties, etc., was furnished with the Marduk motive, if some antiquated method corresponding to the age of the Twins did not prefer the motive of the Dioscuri (see above, p. 185^b). In this way we can explain the mythical setting of the history of Sargon I., who founded Babylon, and in all probability was the first to introduce the Marduk method of reckoning.

* In the Babylonian ideogram of the planets, Jupiter signifies 'bull of the sun,' and is explained as the 'furrow of the heavens' which the bull of the sun ploughs.

'Sargon the mighty king of Agada am I. My mother was a vestal,[†] my father of the lower class. . . . My vestal mother conceived me, in secret did she bear me. She laid me in an ark of bulrushes, closed my doors with pitch, laid me in the river. . . . The river bore me downwards to Akki, the water-carrier. Akki, the water-carrier, received me in the friendliness of his heart, brought me up as his child, made me his gardener. During my activity Istar fell in love with me. . . . For years I enjoyed sovereign power.'

It is related of the hero of the Babylonian Gilgameš Epic how Istar seeks to win his love. Elian, however (*Hist. Anim.* xii. 21), says his mother had been a king's daughter, who conceived the hero by means of an insignificant man.

Gudea, the South Babylonian priestly prince, says to the goddess, who stands by his side, 'I have no mother, thou art my mother; I have no father, thou art my father; in a secret place hast thou borne me.'

Ninib appears in an epic poem as the hero, who will allow his royal power to extend to the bounds of heaven and earth. He is a child of Istar, he is called 'My father know I not.'

Asurnasirpal allows the following story to be told of himself:

'I was born in the midst of mountains, which no man knoweth; thou hast, O Istar, with the glance of thine eyes chosen me, hast longed for my supremacy, hast brought me forth from the mountains, and called me as ruler of men.'

Ašurbanipal wishes to be regarded as a child of Istar, who had once nourished him. The writers of his tablets represent his Age as the Golden Age of the world (cf. p. 187^b).

(c) *Age of the Ram*.—The recognition of the fact that the calendar must now be arranged according to the Ram as the vernal equinox, and the fixing of it so, give to the otherwise unimportant king Nabonassar (Nabû-nasir, 797-734) a special significance. The framers of the calendar in his time have dated a new age from Nabonassar. Syncellus relates (*Chronographia*, 207) that Nabonassar, according to the testimony of Alexander Polyhistor and Berossus, destroyed all historical documents relating to his predecessors, in order that dates might be reckoned only according to his time (*εναγένετος τὰς πράξεις τῶν πρὸ αὐτοῦ βασιλέων ἡφάσισται, διότι δὲ αὐτῷ ἡ καθαρίθμησις γένηται τῶν Χαλδαίων βασιλέων*).

The breaking of the tablets is not to be taken literally. It is the same as the burning of the books in reforms of other ages, in Persia under Alexander, in China, B.C. 213, under Chin-shih-hoang. In the case of the burning of the libraries of Alexandria, too, this motive must be taken into consideration. It signifies the beginning of a new era of Islam in Egypt under Omar.

This is the reason why the Babylonian chronology contained in the extant inscriptions begins with Nabonassar. The Ptolemaic canon, too, which, as is well known, did not follow historical ends, but represented a calendar with astronomical limits,† had begun with Nabonassar. The misunderstanding of Syncellus can also be explained in this way; the *Chronographia* (267) says the Babylonians had from the time of Nabonassar written down the periods of the courses of the stars (*περὶ Ναβονασσίου τὸν χρόνον τῇσι τῷσι δέρεψεν κυκλούσιοι Τήκριβωσαν*).

In Babylon itself the reform of the Age of the Ram never obtained full recognition, because the Age of Nabonassar coincided with the fall of Babylon. The old Babylonian reckoning kept its hold here. Still Berossus, under the rule of the Seleucids, reckons, as we saw (p. 183^b), with the Age of the Ram. The new reckoning seems to have found its chief support in Egypt. Just as the Bull Age received recognition by emphasizing Marduk of Babylon, in the same way the Age of the Ram served the purpose of glorifying Jupiter Amon, who is represented with the head of a

* Entu, the 'sister of god,' in the Code of Hammurabi, the priestly representative of the sister-wife of Marduk, Istar.

† It was carried further for several centuries after Christ. Claudius Ptolemaeus is by no means the author; he had collected the traditions and preserved them in their true form.

ram, although he is in his nature identical with Marduk. Alexander the Great, who allowed himself to be celebrated by contemporary writers as lord of worlds, and to be painted by Apelles as Jupiter, consulted the oracle in the oasis of Jupiter Amon. Manetho says that under Bocchoris 'a ram (*ἀρνίς*) spoke.'

The doctrine of the Ages of the World, as may already have been inferred from the preceding explanation, is connected with the expectation of a deliverer. As deliverer there appears the Divine power, which reveals itself in the spring equinox. It is Marduk-Adapa, it is the 'ram,' which, according to the Age, overcomes the power of darkness. In 4 Ezra (11⁴⁴⁻⁴⁶) the seer reflects on the ways of the Highest:

'Then the Highest looked at his times; lo, they were at an end, and his sons (*εὐκλεῖα*) were full . . . Now the earth will be refreshed and return . . . and trust in the judgment and mercy of her creator.'

In these words lies the fundamental religious idea of the doctrine of the Ages of the World. 'The sons were full.' 'The time is fulfilled.'

The connexion of the doctrine of the Ages of the World with the expectation of a deliverer produces the following characteristic opinions, which meet us at once as axioms:

1. *The Age of perfection lies at the beginning.* Just as pure knowledge, revealed by the godhead, lies at the beginning, so that it is the task of science to discover the original truth by observation of the book of revelation written down in the stars, and to obtain freedom from the errors which have crept in through human guilt, so also the Age of pure happiness lies at the beginning.

This fundamental idea has produced a special theory regarding the doctrine of the Ages of the World which is based on the connexion of the planets with the *metals*. Silver is the metal of the moon, gold the metal of the sun, † copper the metal of Istar. According to the reckoning which begins with the Age of the moon, the silver must have been the first Age, on which a less valuable then followed. We know from classical antiquity the succession: Golden, Silver, Copper (Iron) Ages (Hesiod, *Works and Days*, 90 ff., and Ovid, *Metam.* i. 89 ff.). The succession of the Ages of the World lies also at the basis of the Book of Daniel. The commencement with the Golden Age points to Egypt, where the sun predominates (see above, p. 184^b). It may, however, point to the Babylonian conception, which gives the first place to Marduk as a sun-phenomenon, just as the planetary series of our days of the week places Sunday before Monday. The Golden Age is also called the Age of Saturn. Owing to the change of the heptagram into a pentagram, Saturn is represented by the sun, as Mars is by the moon; and an astronomical text of the Babylonians, which has been handed down to us from the time of the Arsacids, expressly says that Saturn and the sun are identical.‡ As far as the rest are concerned, the order of succession corresponds to the astral theory. The third, the Copper Age, corresponds to Istar-Venus, the third figure among the rulers of the zodiac.

The succession gold, silver, copper, brings the second characteristic at the same time into view. It is as follows:

2. *The times are becoming worse.*—This is much

* *Omē imīd*, 'the days are full,' are the words in an oracle which Assurbanipal receives in Susa, according to which he is said to have been prophesied 1635 years before as the saviour of Nana, the queen of heaven.

† Therefore the relation of the value of silver and gold in antiquity is 1 : 134, i.e. the relation of the course of the moon to that of the sun (27 : 360). The remains of colours, which Rawlinson found on the planet steps of the Nebo temple in Borsippa, were for the moon silver (white), for the sun golden, for Venus light-yellow.

‡ Cf. for this, the present writer's *Das AT im Lichte des alten Orients*, p. 13.

more strongly expressed when the theory departs from the scheme provided by the planets with regard to the fourth Age, and allows an *Iron Age*, corresponding to the distress of the present time, to follow after the Golden, the Silver, and the Copper Ages. The end of these evil times, which precedes the destruction of the world, is a time of cursing, a time of tribulation, and the reversal of the natural order. The Babylonian omens often speak of this time of cursing, which stands in opposition to the time the deliverer brings (see above): 'When such and such things happen in heaven, then will the clear become dull, the pure dirty, the lands will fall into confusion, prayers will not be heard, the signs of the prophets will become unfavourable.' In a form of curse which speaks of princes who do not obey the commands of the gods, we have the following:

'Under his rule the one will devour the other, the people will sell their children for gold, the husband will desert his wife, the wife her husband, the mother will bolt the door against her daughter.'

In the Atarhates myth, the text of which originates in the 3rd mill. (the time of Ammizaduga), the distresses which precede the Flood are related. In the Ira myth the coming of the deliverer after the time of cursing is expected:

'The seacoast shall not spare the seacoast, Mesopotamia shall not spare Mesopotamia, nor Assyria Assyria, the Elamite the Elamites, the Carians the Carians, the Sutman the Sutmans, the Cutean the Cuteans, the Lulubean the Lulubean, one land another land, one man other men, one brother another, but they shall strike each other dead. But after that shall come the Akkada, who shall lay them all low and overwhelm them severally.'

Signs in the sun and in the moon proclaim the end. In a hymn we have the following:

'Oh, father Bel . . . oh, lord of the land, the ewe rejects her lamb, the she-goat her kid. How much longer in thy faithful city shall the mother reject her son, the wife her husband? Heaven and earth are laid low, there is no light with us. The sun does not rise with his radiance over the land, the moon does not rise with her light over the land. Sun and moon do not rise with their radiance over the land.'

The time of the curse corresponds to the rule of the powers of the lower world. It is like the time of the descent of Istar to Hades. When Venus is in the lower world, all life is dead. As it is in the small year, so is it in the world year.

But then comes the great revolution:

3. *The happy time of the beginning comes back.* The Babylonian texts seldom speak of this time of blessing. It is only from the description of the happy rule of kings, who are praised by the writers of the tablets as the bringers in of a new Age, that we can extract the motives of the time of blessing. Especially is this the case with Assurbanipal.

'Since the time the gods in their friendliness did set me on the throne of my fathers, Ramman has sent forth his rain, Ea opened the springs; the grain was five ells high in the ear, the ears were five-sixths ells long, the harvest was plentiful, the corn was abundant, the seed shot up, the trees bore rich fruits the cattle multiplied exceedingly. During my reign there was great abundance, under my rule rich blessing streamed down.'

LITERATURE.—A. Jeremias, 'Das AT im Lichte des alten Orients', Leipzig, 1906 (ch. 1, 'Die altorientalische Lehre und das altorientalische Weltbild'), *Babylonisches im NT*, do. 1906; Schrader, 'KAT' (3rd ed. revised by Zimmern and Winckler, Berlin, 1908), 382 ff., 380 ff.; H. Winckler, *Altorientalische Forschungen*, iii. 179 ff., 274 ff., 'Die Weltanschauung des alten Orients, Altorientalische Geschichtsauffassung, Es oriente lux, i. 1, ii. 2 (Leipzig, ed. Pfeiffer), 'Himmelsbild und Weltenbild bei den Babylonier' in *Der alte Orient*, iii. 218, Leipzig.

ALFRED JEREMIAS.

AGES OF THE WORLD (Buddhist).—The views of the Buddhists on periods of cosmical destruction and renovation were matters of vivid interest to the first Orientalists, as will be seen from the bibliography on p. 190. This interest has rather languished since the publication of the *Religion des Buddha* of Köppen, the last who has dealt thoroughly with this topic.

* Note how the whole world is embraced in the range of vision.

The fanciful theories of the *Kalpas* or *Ages of the World* do not appear to be essential to Buddhism, whether looked upon as a religion or as a philosophy. Nor are they of mythological moment, being rather matter of 'secular knowledge,' or, as a Buddhist would say, *lokayatika*. Nevertheless, as they can be proved to be very old; as they are made use of when the myriads of Buddhas of the Great Vehicle are honoured, and have been duly recorded by the Buddhists of every country, Sinhalese as well as Mongolian; as, moreover, some bits of philosophical or religious reflexion are interwoven with them, we may be allowed to consider the subject in all its aspects.

There is no beginning of transmigration (or *samsara*); there will be no end to it: on these two points all Buddhist schools agree. But, without mentioning that speculations on the beginning or the end of the cosmos are forbidden by the Buddha in some texts (see *Aśvavasita* [Buddhist]), it must be observed that there is an end to transmigration for the Arhate, who rightly say at the time of dying, 'This existence is for me the last one.' Moreover, in the Buddhism of the Great Vehicle, Avalokita, for instance (see *AVALOKITA*), resolved to postpone his entering into Nirvana till every creature should, by his own really divine exertion, have been carried into the peace of salvation. The problem, where the texts are silent, or rather, contradictory, will probably have to be solved as it has been by the Sāṅkhya: the number of the souls being infinite, there will never come a time when all will have attained Nirvana. Hence there need be no despondency, for we can be among the elect, if only we care for it.

Theories on the revolutions of the world are said, in the *Brahmajālasutta*, to be extraneous to Buddhism, and even alien to its spirit. But they soon became naturalized; and, while originally very like the Brāhmaṇical theories, they were worked after a new plan.

There is mention in the fourth edict of Aśoka of the next destruction of the Universe. 'The pious king hopes that his sons and grandsons, and so on, will maintain good practices till the age of cosmical destruction (*sahvattakappa*).'¹ This text does not, however, prove that the belief in the very speedy disappearance of Buddhism was still unknown.

The canonical Pāli texts do not furnish us with the complete theory now to be stated. These afford only hints or allusions, from which it is difficult to draw any conclusion as to the conditions of the elaboration of the doctrine. These hints, however, will be carefully pointed out. So far as the Buddhism of the South is concerned, we derive our knowledge from the Commentaries, of which the materials are much older than Buddhaghosa, their official compiler; and for the Buddhism of the North from Mongolian, Tibetan, and Chinese sources, confirmed by the *Abhidharma* literature.

The general lines are as follows:

A 'Period' (*kappa*), or 'Great Period' (*maha-kappa*, *kalpa*) of cosmical evolution, is to be divided into four 'Incalculables' (*asankheyya*) or 'Incalculable Periods' (*asankheyakappa*, *asankheyakalpa*). These last are always mentioned in the following order: (1) Period of destruction (*samvattakappa*, *samvartakalpa*); (2) of duration of the destruction (*samvattathayin*, *samvartasthayin*, when the world remains destroyed); (3) of renovation, or rather revolution (*vivatta*, *vivarta*); (4) of duration of the world renovated (*Ānguttara*, ii. 142, iv. 100; *Majjh.* i. 35).

How long is an 'Incalculable' period? The answer given by Buddha himself is a very good one: It is difficult, i.e. impossible, to exhaust an 'Incalculable' by numbering hundreds of thousands of years. In *Samyutta*, ii. 181-2, there is a simile which has found its way into the Chinese and Sinhalese records: 'Suppose a mountain of iron to be touched every hundred years by a muslin veil; the mountain will be destroyed before the Incalculable is at an end—and the *samsara* has no common measure with the Incalculables, nay, with hundreds of thousands of Incalculables': the *samsara* being 'infinite,' as we should say, and the 'Incalculables' indefinite.

The same problem occurs in the *Mahāvastu* (i. 77). It is said that the future Buddha must, be-

fore becoming a Buddha, pass through 'stages' or 'terraces' of immeasurable duration (*aparimita*, *aprameya*). 'If it be so,' asks Kātyāyana, 'how will the future Buddha ever attain the higher stage?' Answer: 'It is the same with the Ages of the World: each of them is immeasurable, and nevertheless there are many Ages.'

Notwithstanding these very clear statements, Buddhists and moderns have tried to calculate the 'Incalculable.' 'Asankheyya,' like many other words of the same meaning (and there are plenty of words in Sanskrit to express 'incalculable'), has been used to indicate an exact number. But the lists of 'high numbers,' the so-called *pānti*, are constructed on different principles: the progression being sometimes by multiples (10, 100, 1000; or 10, 1000, 1,000,000 . . .), sometimes by squares, and the *asankheyya* does not always hold the same place in the lists. A. Rémusat said that an 'Incalculable'=1 followed by 17 ciphers (100,000,000,000,000) years. But these figures give a *pāndita*, not an *asankheyya*. From the *Dhammapadatīpīṭaka*, Burnouf and Hardy admit 1 followed by 97 ciphers; and there is, according to the first named, a very ingenious combination of the first 'nombres premiers' in the formation of this number. Joinville (Sinhalese unnamed sources) has 1 followed by 63 ciphers. From Burmese sources, Pallegoix has 1 followed by 168 ciphers, and Burnouf, 1+140 ciphers. According to the Northern *Abhidharma* list, *asankheyya* being the 53rd of a geometric progression (1, 10, 100 . . .), we have 1 followed by 52 ciphers. Lastly, the *Buddhāvata-saṅhata* list gives a much larger number of ciphers. Given a progression, 10, 10², 10³, 10⁴, . . . *asankheyya* is the 104th term: to write the number thus described we should require 353 septillions of kilometres of ciphers, allowing that one cipher occupies a length of 0.001 m. That suggests in some degree the vastness of an 'Incalculable.'

Theoretically, each 'Incalculable' is divided into twenty *Antarakalpas* (*kappa*) or 'Intermediate Periods.' But the advantage of this division is not very clear, except in the third Incalculable.

When the Great Period begins, of which the Destruction Age is the first part, the average duration of human life is 80,000 years. Gradually there is moral deterioration, with a corresponding decrease in the age of man (see *infra*, p. 189^b). The destruction is near at hand. A hundred thousand years before it is to begin, a *Deva* or Angel (a 'Buddhist Noah,' as he has been called) gives to the world of conscious creatures a warning about the forthcoming calamity.* In course of time all the creatures, with the exception just to be noted, attain reincarnation in higher worlds, i.e. in spheres which will not be overtaken by the destruction. The time for a higher reward may be said to have come for the great majority of creatures, after numerous migrations amongst ordinary good and bad births. They alone 'in whom the root of merit is destroyed' by adhesion to wrong views, and for whom 'the word of deliverance has utterly perished,' cannot by any means ascend into the higher realms; and as the hell in which they are tormented is going to be annihilated, they will take rebirth in the hell of some universe whose destruction is not imminent. Elsewhere it is said that there are self-made hells for them. In the old sources it would seem that only Devadatta, the cousin and rival of Sākyamuni, will endure 'for an age,' or 'for ages' (*kappa*) in a state of pain.

This gradual disappearing of the animate world (*sattaloka*) fulfils the first Intermediate Period of the Age of Destruction. Now begins the Destruction of the 'receptacle-world' (*bhājanaloka*) itself, by fire (*tejahsamvartani*), by water (*apo*), or by wind (*vāyu*).† There is a complete set of 64 Great Periods, in regular succession; seven destructions by fire, then one by water, then seven by fire, then one by water, and so on, the last, i.e. the 64th, being by wind. We are told that the destruction by fire does not reach so high in the various spheres of the cosmos as does the destruction by water; and the

* All the gods called Lokabhyūtas hold this office of Noah, according to the *Visuddhimagga* (Warren, p. 322).

† *Visuddhimagga*, xiii.; *aposamvata*, *tejo*, *vāyu* (JPTS, 1891, p. 118). For the Brāhmaṇical speculations, see 'Matyapurāna,' ap. Aufrecht, *Cat. Oxoniensis*, p. 346; Böhl. Roth, t. v. 'Samvarta, Samvartaka.'

destruction by wind is greater than the destruction by water (*samvattasimā*, limit of destruction).*

But there are discrepancies between the European authorities, and probably also between the sources. Köppen has a very ingenious theory, stating that there are great, mean, and little destructions by fire, and so on. He goes so far as to ascertain the order in which they will succeed, though he confessedly fails to find any authority to support his views. Does the destruction by fire annihilate only the worlds up to the abode of the Mahābrahmans, including the sphere of the first meditation? Or does it annihilate the two abodes immediately superior belonging to the second Dhyāna (*Parittatubhas* and *Apramāṇābbhas*)? Does the Water-Destruction, which in any case destroys the three second Dhyāna abodes, destroy also the two first third Dhyāna abodes?[†] Hardy, misunderstood by Köppen, gives a third opinion: the water destroys the first third Dhyāna abode. Lastly, there seems to be a general agreement as regards the Wind which overthrows the worlds up to the second fourth Dhyāna abode. The matter would be a little too fanciful to detain our attention if we did not find in the *Brahmajāla*, the first Sutta of the *Dighanikāya*, the origin of the contest. Buddha, explaining the origination of the universe, states that, during the period of destruction, beings have mostly been reborn in the World of Radiance (i.e. in the third second Dhyāna abode)—hence the opinion that the fire (the fire must be meant, as it is the more frequent) reaches up to the second second Dhyāna abode; but Buddha adds that, at the origin of time, the Palace of Brahmā with Mahābrahmā appears, this being fallen from the World of Radiance. There is no mention here of the two first second Dhyāna abodes, which would have been necessary steps of decadence; hence the opinion that the destruction does not go higher than Brahma Palace—i.e. the apex of the second meditation.

We may conclude that the theory of the celestial abodes was not perfectly elaborated when the *Brahmajāla* was compiled.

Details ‡ are given of the destruction by Fire, wrought by seven suns, well known in the Brāhmaṇical literature. All water is dried up, beginning with the small rivers; and the appearance of the seventh sun gives rise to the general conflagration. As regards Water, the *Sikṣisamuchchaya* is the only text to give us the names of the four Dragon-Kings who pour drops always increasing in size, each for five Intermediate Periods: Isādhāra, Gajaprameha, Acchinnadhāra, Sthūlbinduka.[§] It treats the matter from a philosophical point of view: 'Whence comes the water?' it is asked. 'From nowhere.' 'And where does it go when the deluge is at an end?' 'To nowhere.' The destruction is also said to reach the Brahma-heaven, but it is not said to go higher. The destruction by winds is parallel. The Pāli commentator gives the name of one of them, *prachchanda*.

Nothing is known of the Second Period. The world remains chaotic, or, if we prefer it, a pure nothing: 'The upper regions of space become one with those below, and wholly dark.' There are no ashes left by the fire; no dust by the wind. One would assume that the water (which, being very acid, disintegrates the Iron or Crystal Mountains) does not annihilate itself. On the contrary, 'the water does not settle so long as anything remains,

* To understand the following, the reader is referred to the Cosmology. We give below the necessary ideas:

Above the world of desire (i.e. the four continents, Mount Meru with its divine inhabitants) begins the world of form, consisting of three (or two) heavens of the first meditation, three of the second, three of the third, eight of the fourth. Above are the four heavens of non-form. The worlds are organized in such a way that the second meditation realms are established above a thousand first meditation realms (Little Chilicosm); that the third meditation realms cover a thousand second meditation realms (Middle Chilicosm); that the fourth meditation realms cover a thousand third meditation realms (Great Chilicosm). For one universe, in the proper sense of the word, there are 1,000,000,000 first meditation abodes (Brahma-heavens), 1,000,000,000 Mount Merus. One universe is the 'field of a Buddha.' The authorities are not very consistent. For instance, we learn that the destructions by fire, etc., destroy the same number of worlds (1,000,000,000). 'In lateral expansion the world-cycle always perishes to the extent of a Buddha's domain' (*Visuddhim. xiii.*, in Warren, p. 321).

[†] The latter opinion is better supported by the texts at our command (*JPTS* 1891, p. 118).

[‡] For particulars see Spence Hardy, *Manual*; Köppen and Warren, loc. cit.

[§] In the 'Matyapurana,' Cat. Oxon. 247b, 28, there are seven clouds 'to give the destruction-water'; the first is named destruction ('sathvarta').

but everything becomes impregnated with water and then suddenly settles and disappears.'

When the time of renovation is come again, i.e. when the former merit of the beings born in higher abodes is exhausted, and they have to be reborn in inferior regions, first (in the case of destruction by fire) appears the abode of Brahmā (Brahmavimāna), with its threefold division of inhabitants, coming from the Ābhāsvara abode; then in order the three Deva abodes of the Parinirmitavaśavartins, the Nirmānaratis and the Yāmyavimāna (gods, Yāmas, the Tuśitas, etc., are not named); then the Circle of the Wind (*vāyumandala*) on which is established the Circle of Water, etc., with Mount Meru and its heavenly inhabitants, with the sun and the moon, etc.: all this is called the *bhājanaloka* or the 'receptacle-world.' And that is the end of the first Intermediate Period of the 'Incalculable of Renovation.'

During the nineteen following periods the inferior parts of the *bhājanaloka* are successively peopled by men, and so on. First the men are said to be *aparimitayu*, i.e. 'of immeasurable life.' Such they remain to the end of the Period of Renovation, according to the *Abhidharmaśāstra*. The sources known to Hardy and Köppen agree in stating a decrease to 80,000 or 84,000 years. When the infernal beings have appeared, the Incalculable Period of Renovation (*vivartamāndavasthā*) is finished.

The following Period of Duration (*vivṛttavasthā prārabdhā*) is divided into twenty well-characterized Intermediate Periods. During the first, the whole of which is of decrease, the average duration of human life falls from 'immeasurable length' (or from 80,000 years) to ten years. The eighteen following are divided into two parts: the first of increase (*utkarṣakalpa*, *urdhvamukha*), during which life increases from ten years to 80,000 years; the second of decrease (*apakarṣakalpa*, *adhomukha*) inversely to the first. The twentieth and last is only of increase. We do not know if the first and the last are shorter than the remaining ones, but that seems probable.

Here the Brahmanic theory of the Four *yugas* finds a place: the increasing will be divided into the Iron, Bronze, Silver, and Golden Ages; and the decreasing will be parallel (Kali, Dvāpara, Treta, Kṛta). We are now (A.D. 1907) in the Iron Age of the first Intermediate Period of the Period of Stability (this Intermediate is only decreasing). From hundred years, the highest attained in the Iron Age, life is declining to ten.

When the decreasing Kali Age begins, the five calamities (*kaṣaya*) begin to prevail; but when life is reduced to ten years (*dasavṛṣṭayu* *kalpa*) the destiny of men is worse. At the end of every Intermediate Period (except the last, or the 20th, which is only of increase) the greater number of living beings pass away by hunger, epidemics, and sword. Some say that these three plagues work together, some that they appear in succession, as in the *Abhidharmaśāstra* and the *Mahāyūpatti*; and this same diversity of opinion manifests itself in the Mongolian and Chinese sources. Spence Hardy establishes a connexion between prevailing vices, plagues, and forthcoming destruction: Love, Epidemic, Fire; Hate, Sword, Water; Delusion, Hunger, and Wind. It would follow, as Destruction is coming only after many Intermediate Periods, that during the whole of the 'Incalculable,' every Intermediate has epidemics, etc., according to the final modes of passing away.[¶] The majority of the creatures being dead, the remaining ones are 'converted,' and the age of man increases again. A new intermediate Age has begun.

If we except the speculations on the 'creation' by the united merit of all sentient existence, and on the 'repopulation' of the worlds, which are perfectly free from pantheistic views, and, being built on the doctrine of *karma*, are perfectly Buddhistic, there is not much Buddhism in the cosmogony we have studied. We must add some details which are part of the Buddhist's own mythology.

Periods (i.e. great Periods) are said to be 'void' (*śūnyakalpa*) if no Buddha appears in them. They are 'non-void' or 'Buddha-periods' in the opposite

[¶] See Köppen, 282, n. 1. He adds that, according to 'some,' these plagues appear only in the Intermediate Period immediately preceding the Destruction.

case. Sometimes a great Period elapses between two appearances of a Buddha; sometimes an incalculable number of great Periods; sometimes, on the contrary, there are in the same period many Buddhas. We have 'substantial' periods (*adra*), with one Buddha; 'curd'-periods (*mandra*), with two; 'excellent' (*vara*), with three; 'substantial-curd'-periods (*adramanda*), with four; 'auspicious' (*bhadra*) or 'greatly auspicious,' with five. Such is the present Period. There have been twenty-nine 'void' Periods before it. So far the old tradition. The redactors, moreover, of the *Mahāvastu* (iii. 330), the Chinese Buddhist pilgrims, etc., are already aware that in the Bhadrakalpa a thousand Buddhas are wanted.

At the beginning of the Universe, when the primordial water (see above, 189^b) is about to give way for the appearance of the solid world, a lotus appears at the place where the sacred tree of Buddha has been and will be.* There is no flower if the period is to be void; there are as many flowers as forthcoming Buddhas.† Compare the Brāhmaical flower.

Another point of interest is the description of the first men, or, as it has been called, the Buddhist Genesis.‡ Originally, falling as they did from the Ābhāvara-abode, human beings retained the attributes of their former existence. Born by 'apparitional-birth,' self-radiant, with joy as their only food, and with spiritual bodies, such beings are evidently meant by the 'men of immeasurable life' referred to above (see p. 189^b). There is neither sun nor moon. As time goes on, earth appears on the surface of the primeval ocean. It is a savoury earth, and, as it were, a foam. Men eat it, and their radiance is lost for ever. Sun and stars furnish some light. Then follows the eating of some honey-moss, of creepers, of a marvellous rice. It is a long decadence. When this last has become a regular food, organs of sex appear; and with the institution of marriage, of private property, and of caste, begins the organization of human society. Interesting for general folklore (especially the details on marriage), the story is certainly very old, and was adapted before the classification of the celestial abodes. That in falling from the Ābhāvara-abode the beings do not go through the heavens of Brahmā and the Devas, and that these are utterly ignored, are significant facts. But it is more astonishing that the 'self-appearing' men do possess the attributes of the Ābhāvaras. We might assume that there was originally no connexion between these first men and any sort of degenerated gods. The first men were regarded as *ābhāvaras*, i.e. 'resplendent,' and the Ābhāvara gods themselves may be derived from this old conception.

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a. Indian Sources.—*Viruddhimaggā*, xiii, trans. by Warren, *Buddhism in Translations* (1900), p. 321 ff.; the Sarvāstivādin treatise entitled *Lokaprajapti*, known in the Tibetan version (*Ajigren-gdag-pa*, Tandjur, Mdo. lxii. 1-107), regarded by the

* On the intervention of the *vajrdeana* see Beal, *Buddhist Records*, II. 116.

† In the late records a thousand lotuses appear at the beginning of the Bhadrakalpa.

‡ By Prof. Rhys Davids, *Dial. of the Buddha*, p. 106, and by A. J. Edmunds, 'A Buddhist Genesis,' *Monist*, xiv. 207-214. The text is the *Agatikasutta* (Digha xxvii.); it is translated from the Chinese by S. Beal, *Four Lectures*, pp. 151-155, and it is found in the *Mahāvastu* (Sacred Book of the Mahāśāṅghikas), I. 333-348. See E. Hardy, *Buddha*, p. 81.

Vaibhāgikas as forming part of the Scriptures, but in reality constituting a *Sūtra*; the *Lokaprajapti-abhidharma-sūtra* (Nanjo 1297), said to be closely related to it (see Takakusu 'On the Abhidharma Lit.' in *JPTS*, 1906, pp. 77 n., 148); neither the Tibetan nor the Chinese treatise seems to have been directly studied. It is the tradition of these books of *Abhidharma*, doubtless, that is found in the *Abhidharmakāvya* (cf. fol. 262 of the MS. of the French Asiatic Society, which has been consulted for the present article).

L. DE LA VALLÉE POUSSIN.

AGES OF THE WORLD (Christian)*.—The poets and the philosophers of pagan antiquity have, as a rule, represented the evolution of man as a gradual but inexorable decay, putting the happy era at the beginning, and asserting that the world would end in complete destruction. The Christian idea is exactly the opposite; and this is quite natural, for Jesus Christ caused a great hope to shine on humanity, groaning in the darkness of paganism. The prophets of Israel had already flung out some rays of this hope, in foretelling the coming of the Messiah, who would establish on earth an era of true religion, of peace and happiness. In short, while pagans placed the Golden Age in the past, Christians put it in the future; they have described the history of the world as an ascent, if not continuous, at least intermittently progressive, and finally triumphant, towards good and happiness. The writer of the *Apocalypse* (ch. 20) describes in an imaginative style the last phases of this historical drama.

St. Augustine is the first Father of the Church who explicitly mentions Seven Ages in the history of man, and all the theologians who followed him were more or less inspired by his idea. His plan is derived from the 'Days of the Creation' in *Genesis*. The passage is *de Civitate Dei*, xxii. 30 *ad fin.*

Paulus Orosius, a Spanish priest (d. 418), the friend and admirer of St. Augustine, to whom he dedicated his *Historia*, besides trying to prove incidentally the Bishop of Hippo's theory of the government of God in history, divided his work into seven books, which, however, correspond to different epochs. He had clearly come under the influence of Roman history. The founding of Rome, the taking of the city by the Gauls, the death of Alexander, the taking of Carthage, the Servile War, the reign of Caesar Augustus, with which he makes coincident the birth of Jesus Christ,—these are the memorable events which form the boundaries of his periods.†

The Venerable Bede (d. 735), who in his *Chronicles* owes much to Paulus Orosius, also adopts seven Ages, and surmises that the last one, ending with the year 1000, will mark the end of the world.

Adson, abbot of Montier-en-Der, in his treatise,

* [As the Jews were accustomed to distinguish the age before, from the age after, the advent of the Messiah, so the majority of NT writers distinguish ἡ εἰών οὐτος from εἰών διάλλετον. In both cases an ethical is always superimposed upon the temporal meaning. The former age is the period which shall elapse before the appointed Parousia of Christ, 'the period of instability, weakness, impurity, wickedness, calamity, misery' (Thayer); the latter is the age after Christ has come again in power to establish the Kingdom of God definitively, with all its blessings. It is inaugurated by the resurrection of the dead, and it answers, in scope and nature, to the completed work of Christ. The present world, as being material and transient, is under subjection to angels, who mediate the Law; the world to come (ἡ οἰκουμένη ἡ μελλούσα, He 2^b), on the other hand, is viewed as already existent, in a sphere transcending this earth, out of which it will come down as a new and divine order of things. The term 'world' (οἰκουμένη) expresses the constitution of that state of things which as 'are' (εἰών) is viewed more in relation to its development in time. The tone of the NT in speaking of the present age is almost invariably one of censure. The gulf between the two ages, however, is not conceived as being quite absolute. 'The powers of the age to come' (He 6^b) project themselves in manifold ways into the present age, diffusing harmony and order throughout what is otherwise a chaos, and preparing ultimately to supersede the laws of the present dispensation.] H. R. MACKINROTH.

† See the Anglo-Saxon version of the *Historia* of Orosius by Alfred the Great, ed. Bosworth, London, 1869.

de Antichristo, dedicated to queen Gerberge (954), sketches the preliminaries of the final judgment, which will follow the apostasy predicted by St. Paul, and the struggle against Antichrist; and he puts off the end of the world until this epoch.

Bernard, a hermit of Thuringia (d. 980), announces, on the contrary, that the end of the world is near. He and a great number of preachers in the 10th cent., through their allegorical interpretation of the Apocalypse, spread the belief in the immediate coming of Antichrist and the end of the world. Nevertheless their position was combated as an error by Abbo, abbot of Fleury-sur-Loire, the most learned monk of his time.

Scotus Erigena (d. circa 890) groups the first six Ages into three epochs, each marked by a different priesthood. The first epoch, comprising the first five Ages of St. Augustine, was contemporary with the patriarchs and priests of the OT. The second, beginning with Jesus Christ, was marked by the priesthood of the NT. Erigena foretells a third in the everlasting life, when all the faithful will serve as priests, and will see God face to face.

Joachim of Floris (d. 1202), the famous visionary hermit of Calabria, in his book, *de Concordia*, adopts Erigena's division into three Ages or religious conditions, and places each under the control of one person of the Trinity; but, differing from his predecessors, he holds that these periods overlap each other. The Age of the Father extends, according to him as well as to Scotus Erigena, from Adam to Christ. The Age of the Son starts from Elisha, and reaches as far as 1260. The last Age, that of the Holy Spirit, takes its origin from St. Benedict and the establishing of the monks in the West, and will last until the end of the world.

'The first era,' says Joachim, 'was that of knowledge, the second that of wisdom, the third will be that of complete intelligence. The first was servile obedience, the second was filial servitude, the third will be liberty. The first was the trial, the second action, the third will be contemplation. The first was fear, the second faith, the third will be love. The first was the age of slaves, the second that of sons, the third will be that of friends. The first was the Age of old men, the second that of young people, the third will be that of children. The first passed under the light of the stars, the second was the dawn, the third will be broad daylight. The first was winter, the second the beginning of spring, the third will be summer. The first bore nettles, the second thorns, the third will yield wheat. The first gave water, the second wine, the third will give oil. The first is connected with Septuagesima, the second with Quadragesima, the third will be Easter. The first Age refers, then, to the Father, who is the originator of all things; the second to the Son, who condescended to put on our clay; the third will be the Age of the Holy Spirit, of whom the Apostle has said, *Where the spirit of the Lord is, there is liberty*' (*de Concordia*, lib. v. c. 84).

Dante does not number the Ages of the World, but, borrowing the form of his prophecy from the figures of the Apocalypse, foretells the vengeance of God against the Dragon, which has broken the wheel of the Chariot of the Church, and announces that the one sent by God, whose number is 510 (=DVX), will kill the foul thief and the giant who sins with her (*Divina Commedia*, Purg. xxxiii. 43 ff.).

Bossuet, in his *Discours sur l'histoire universelle* (1681), returns to the seven Ages of the *City of God*, but considerably modifies the divisions of St. Augustine. According to him, the first Age, from Adam to Noah, comprises the creation and the beginnings of man. The second, from Noah to Abraham, was marked by the Flood and the first punishment of man, and opens the era of the bloody conquests. The third Age, from Abraham to Moses, was contemporaneous with the beginning of the OT. The fourth stretches from Moses to the building of the Temple at Jerusalem by Solomon. The fifth goes to the end of the captivity of Babylon; the sixth runs from Cyrus to Jesus; the seventh, and last, reaches from the Nativity up to our time. It is evident that Bossuet looked only at the past;

he did not borrow the Bishop of Hippo's beautiful prophecy of a seventh Age,—the Age of rest and of face to face contemplation of God, when Christ has triumphed over His enemies, and God is all in all.

The Neapolitan Vico (d. 1744), in his *Scienza Nuova*, distinguishes three Ages in the history of the different nations. The Divine Age, or, so to speak, the infancy of man, where all is divinity and authority, belongs to the priests; the Heroic Age, where the conquerors rule by brute force; and the Human Age, the period of civilization, after which men will return to their primitive state. Mankind, according to him, will turn round perpetually in this circle—a theory similar to that of the Stoics.

It was the privilege of a Frenchman, more famous as an economist than as a theologian, to return to the Christian idea of a progressive development. Turgot, a prior in the Sorbonne, at the age of twenty-three (1750), in his *Discours sur le progrès successif de l'esprit humain*, established the contrast between the pagan notion of a Golden Age at the beginning of the world, and the idea of the perfecting of mankind. In the same way as sons and heirs profit by the knowledge and advantages acquired by their fathers and grandfathers, so, according to Turgot, there is a heritage of truth, of intellectual, moral, and economic progress, which, in each new generation, enriches the patrimony of humanity. Hence comes progress.

In the 18th and 19th cents. the idea of the development of the Ages of the World, i.e. of mankind, by analogy with the ages of human life, was renewed by some Christian philosophers. J. G. Herder, in *Ideen zur Philos. d. Gesch. der Menschheit* (1784), admits that there are in the evolution of races and nations, as in the life of plants, periods of growth and blossoming, of fruit-bearing, and, lastly, of withering. Mankind tends, by the reciprocal influence of the nations, to the realization of that blessed Age announced by Christ under the name of the 'Kingdom of Heaven.'

The founder of positivism, Auguste Comte (d. 1857), thinks that religion is contemporary with the infancy of humanity.

'Following the very nature of the human mind,' he says, 'each branch of knowledge must pass through different stages: the theological stage, which is the age of fiction; the metaphysical stage, which is that of abstraction; and the scientific stage, which is the positive age' (*Cours de philosophie positive*, iii., Appendix, p. 77).

Henrik Ibsen maintains that man evolves in turn through three phases:

'the kingdom founded on the tree of knowledge; the kingdom founded on the tree of the Cross; and, lastly, the kingdom founded on these two trees at once, for the sources of its life are in the paradise of Adam and at Golgotha' (*Emperor and Galilean*, 1st Part, Act III.).

Drummond, in his *Ascent of Man* (1894), distinguishes three ages in the evolution of the world: the first, in which the Vegetable Kingdom was led to produce the flowering plants; the second, the evolution of the Animal Kingdom, where the possibilities of organization were exhausted in the Mammalia; lastly, the third, which comprises the ascent of man and of society, and is bound up with the struggle for the life of others. 'This is the Further Evolution, the page of history that lies before us, the closing act of the drama of Man' (p. 448).

This is a short sketch of the Christian theories of the Ages of the World. In opposition to the pagan conception of a fateful decay of man, ending in annihilation, the Christian conception, derived from the Messianic idea of the Hebrews, shows the ascent, the progress of man, though not without falls, towards more truth, more justice, and more happiness. The socialists of the present day have unwittingly adopted the Christian idea of the 'Millennium.'

Pascal summed up the Christian conception of the Ages of the World very well when he said: 'The whole race of men, during the course of so many centuries, ought to be considered as being the same man always living and continually learning' (*Fragment d'un traité du Vide*, Paris, 1897, p. 436).

LITERATURE.—Rev 20: Augustine, *de Civitate Dei*, xxii. 30 ad fin.; Paul Orosius, *Historiarum mundi, libri vii. adversus paganos, sive Ormista*; Bede, *Chronicon, sive de actibus mundi*; Scotus Eriugena, *Homilia in prologum Iohannis evangeli*; Joachim de Floris, *Liber de Concordia*, v. 84; Vico, *Principi di una Scienza Nuova d'intorno alla commone natura della nazioni* (1725); Turgot, *Discours sur le progrès de l'Humanité* (1750); J. G. Herder, *Ideen zur Philosophie der Gesch. der Menschheit* (1784); Auguste Comte, *Cours de philosophie positive* (1830-42), iv., App. 77; H. Ibsen, *Emperor and Galilean* (1873); Jules Roy, *L'an mille*, Paris (1885); Drummond, *The Accent of Man* (1894).

GASTON BONET-MAURY.

AGES OF THE WORLD (Egyptian).—In their literature the Egyptians have not left any formal description of the world and its ways as they imagined it to have been in past ages. Manetho (c. B.C. 300), enumerating the rulers of Egypt, records in the period before Menes two dynasties of gods, followed by four others the character of which is not defined, and finally a dynasty of *rêkues*, demigods. The fragments of the Turin Papyrus of kings prove that such a view was already established in the 14th cent. B.C., although the details cannot yet be recovered. Hephaestus, the creator-god, heads the list in Manetho, and he is immediately succeeded by the sun-god. These two correspond in Egyptian to Ptah and Rê, the latter being the organizer of the world. An inscription of the Tenth Dynasty says of the temple of Siut that it was 'built by the fingers of Ptah and founded by Thoth for Ophois,' the local god; and a Ptolemaic text ascribes to the sun-god, during his reign on earth, the building of most of the Egyptian cities and their shrines. Stories of the time of the rule of the gods on earth are seen in the mythology (e.g. the myth of Osiris, and the legend of Hathor's massacre, and the Heavenly Cow) and in the popular tales (vaguely in the story of the Two Brothers). 'Since the time of the god' and 'since the time of Rê' are old formulas for expressing immemorial antiquity; so also is 'since the time of the worshippers of Horus.' These last correspond to Manetho's *rêkues*, and have been shown by Sethe to be historical personages, representing the kings of Upper and Lower Egypt before Menes united the two lands. Their records, when they had not perished altogether, were written in so primitive a style as to be undecipherable to the Egyptians of the third millennium B.C., and these 'worshippers of Horus' entered early into the realm of the legendary. The Turin Papyrus appears to give 23,200 + α years to the god-kings, and 2100 + α years to a dynasty of 19 'worshippers of Horus.' The wise Ptahhotep, in his rather cryptic proverbs dating from the Old Kingdom, seems to refer to 'the counsels of them of old, of them who listened to gods'; and the 'worshippers of Horus' are the type of virtue rewarded in the same collection of proverbs: 'An obedient son is like a worshipper of Horus, he hath happiness in consequence of his obedience; he groweth old, and attaineth to the honour of great age.' Thus there was some idea of a more perfect condition having prevailed in primordial timea. None the less, the myths show rebellion, deceit, and wickedness of all kinds appearing amongst both gods (e.g. Seth) and men in the age of Divine rule.

LITERATURE.—Meyer, *Ägypt. Chronol.* p. 115; Sethe, *Bair. z. ältesten Gesch.* *Ag.* i. p. 8; Maspero, *Dawn of Civilization* (1901) p. 160.

F. L. GRIFFITH.

AGES OF THE WORLD (Greek and Roman).* —The Greeks, and after them the Romans, were

* There is no extended treatment of this subject as a whole. Among the three or four briefer accounts, the only one of any

especially interested in this subject, and it is largely to their speculations that we owe those familiar references to the Ages which we find in the literary tradition of our Western civilization. In the Greco-Roman world this theme was actively discussed for nearly a millennium. During that long period the theory of the Ages was worked over again and again by the various schools of philosophy, by manifold attempts to harmonize conflicting authorities or to incorporate new ideas, by the lore of the people, by the fictions of the poets, even by the embellishments of mere rhetoric. The result is that a complete and detailed examination of the question is not to be expected in the space at our command.

Every theory upon this subject belongs to one of two types. The first assumes that man has risen from his former estate; the second, that he has fallen. Both of these occupy an important position in the history of ancient thought, but, so far as the present inquiry is concerned, the theory of descent, that belief in the progressive degeneration of mankind which is cherished by the folk of many races, was at all times the dominating type. The well-known lines of Horace (*Odes*, III. vi. 46-48),

'Eas parentum, peior avis, tuit
Non nequiores, mox daturae
Progeniem vitiodorem.'

are the expression of a view which recurs again and again in the Greco-Roman world, from the Homeric poems (*Il.* i. 272, v. 304; *Od.* ii. 276, etc.) to the last words of Classical Literature.

A strictly chronological development of our subject is impracticable. The blanks in our surviving tradition are so large, especially in the departments most important to us, that no definite date for the inception of any one article of doctrine may be assumed with safety. Indeed, practically every idea by which the later tradition is distinguished will be found upon examination to possess a high antiquity. We may assert, however, that three periods of formative influence are especially prominent. The first is represented by Hesiod, the second by the Stoics and their predecessors, the third by the revival of Mysticism in the 2nd cent. B.C.

i. Hesiod.—The position of Hesiod was always paramount. The influence of Hesiod upon our theme is very much the same as was the influence of Homer upon the form and content of Greek Literature. The account of the Ages which we find in his *Works and Days* (109-201) is our earliest classical authority upon the subject. It is, also, to a remarkable extent, the centre and ultimate source of the later development. There were several other accounts of the early history of man, and some of them were evidently folk-legends of a high antiquity. None of them, however, is of any great importance to us. A few have contributed a detail here and there to the development of the Hesiodic norm, but most of them languish in comparative obscurity. Such being the case, it will be advisable to make Hesiod our basis, and to begin with a summary of his famous account.

First of all, the Olympian gods made the 'Golden Race of men.' These men lived when Kronos was king in heaven. They fared like the gods themselves, always making merry, and untroubled by toil or care, for the teeming earth bore of its own accord an abundance of all good things, and there was no old age. Even death itself, when at last it came, stole upon these men like a pleasant slumber. When this race passed away, Zeus made them the good spirits that live above the earth and are the invisible guardians and helpers of mortal man.

Then the Olympians made a second race, the men of the Silver Age. These were far inferior to the Golden Race, for they remained little children a hundred years, and when they finally reached maturity they straightway perished by their own folly, for they slew each other and refused to worship the immortals as men ought to do. Therefore Zeus was wroth, and put them

real value is by O. Gruppe, in his *Gr. Mythol. und Religionsgesch.*, Munich, 1902, pp. 447-450 (Müller's *Hdb. der Klass. Altertumswissenschaft*, vol. v.).

away. But even these men were honoured, for they were made the good spirits that live below the earth.

Then Zeus made another and a third race, the men of the Brazen Age. They were sprung from the ash-trees, and were strong and terrible, eating no corn, lovers of war and violence, and knowing nought of pity. Their weapons and their houses were of bronze, and they wrought in bronze. There was no iron. These men, too, fell by the work of their own hands and fared to Hades, nameless and unhonoured. Mighty they were, but dark death laid hold of them, and they left the bright light of the sun.

Then Zeus made a fourth race, better and more just. These were the Heroes of the elder days, such as fought at Troy and at Thebes. We call them the Demigods. And when they perished, Zeus gave them a life and an abiding-place at the ends of the earth. There they dwell in careless ease in the Isles of the Blest, hard by the deep-eddying streams of Ocean, and thrice a year the earth bears them fair fruit.

Would that I had not been allotted to the fifth period, but might have died earlier, or else have been born later! For this is the Age of Iron. There shall be no surcease from labour and sorrow by day or by night, and the gods will lay bitter burdens upon us. But, even yet, not all will be bad. This race shall Zeus destroy, when men are born with hoary hair, when fathers strive with sons and sons with fathers, guest with host and friend with friend; when brothers cease to be dear, when goodness, justice, and piety are no longer regarded. . . .

Then Aidos and Nemesis, whose fair bodies are clothed in pure white raiment, shall depart to heaven, and men shall find no succour in their grievous calamity.

The inconsistencies in this account were perceived by the ancients themselves, and in modern times an extensive literature has gathered about the subject.* For our present purpose, however, it is enough to say that these inconsistencies are due to the fact that Hesiod's version is a composite structure, the main support of which is an ancient division of the history of mankind into four Ages. No reference to this version is found in the Homeric poems, but, even at that early period, some form of it was probably current among the Greeks.

The designation of these four Ages by the four metals—gold, silver, bronze, iron, in the order named—is, in itself, an indication that the theory of descent is the fundamental idea of the legend. True, the causes and symptoms of descent, the coefficients of degradation, so to speak, are by no means clear at first sight. This, however, is, in itself, a striking proof of the high antiquity of the theory. Our long familiarity with the later phases of the legend naturally suggests the ethical *motif* as the standard of measurement here. But in the primitive stages of a myth like this, neither morality nor moral responsibility is of much account. The Golden Age is a replica of heaven, a mortal reflexion of the glory of the immortals. The men of those days were superior to us simply because they were made so. They were nearer the gods than we. Their position was a matter of powers and privileges, not of character. The long descent from those happier days has been measured by the gradual loss of those powers and privileges. The causes of it are in the will of the gods themselves. The idea of moral responsibility as a factor in the problem belongs to a period of more mature reflexion, and we see the first beginnings of it in Hesiod's own account. Peace and plenty in the first Age are followed by brutish anarchy and violence in the second. The third sees organized violence and deliberate cruelty; the fourth, crime of every sort and description. The steps, however, are none too clear, and the old description of the Ages was not yet in harmony with the new standard.

During the subsequent history of our discussion, more and more emphasis was given to the ethical *motif*. The basis of it continued to be the assumption of a descent from innocence and happiness to guilt and misery, the adumbration of which has

already been observed in Hesiod. More specific details of the process frequently reflect the philosophical tenets of the writer, and may, also, be freely manipulated in the interests of rhetoric or for other purposes.

The principal difficulty with Hesiod's account arises from the fact that there was no place in the old four-fold scheme for the Heroic Age. As a matter of fact, the Heroic Age belongs to another and a different account of the development of mankind. Neither of these accounts, however, could be neglected, and in Hesiod we see the first known attempt to combine and harmonize the two. The deduction upon which it was based seems tolerably clear. According to the old four-fold system, the Brazen Age immediately preceded our own. On the other hand, it was also generally accepted that the Heroic Age immediately preceded our own. Consequently, the Heroic Age of the one scheme ought to coincide with the Brazen Age of the other. This, however, is impossible, as any one may see by comparing the two. Hesiod, therefore, inserted the Heroic Age between the Brazen and the Iron Ages of the old scheme, and re-numbered accordingly. The result was a system of five Ages, the inconsistency of which was usually clear enough to the ancient critics themselves.* For example, the famous accounts given by Aratus and Ovid indicate a full realization of the fact that the only way of harmonizing the two systems was either to revise Hesiod's conception of the Four Ages in such a way that the Heroes could find a place in the last of them, or, better still, to shift all four Ages to the past. In that event, our own race, of which the Heroes are, in any case, the earlier and better exemplars, may be assigned to the period between the close of the Iron Age and the present day.

As we have already seen, the presence of the Heroic Age in Hesiod's account upsets the principle of progressive degeneration, a fundamental idea of the old four-fold scheme. It also runs counter to the belief that each one of the Ages is represented by its own separate and distinct race of men. It was not until the rise of the Cyclic Theory that this idea was in any way disturbed, and, even then, the process was one of revision rather than destruction. Much less was the doctrine of successive races affected by the later intrusion of the Flood Legend. At first thought, we might esteem ourselves the descendants of Deucalion and Pyrrha, who were themselves survivors from the previous Age. But the story itself reminds us that we are really *terrigenea*, a new race sprung from the earth.

We now come to one of the most notable and, doubtless, one of the most ancient features of our legend. This is the significant association of it with the great dynastic change of Olympus. The Golden Age was under the sway of Kronos. Since then, his son Zeus has ruled the world in his stead. On this basis, the Four Ages are sometimes reduced to two, the Age of Kronos and the Age of Zeus, the old régime and the new, the happy past and the unhappy present. This may well be an older and a simpler version. But it occurs only in the later writers,† and, so far as they are concerned, is probably for brevity, or to score a rhetorical point.

Real variations from this feature of the old account are especially characteristic of the philosophers, and may best be taken up in connexion

* Rohde, *i.c.*, contends that the principle followed by Hesiod in his classification and discussion of the Five Races was not their condition in this world, but their status in the world to come. This view has not met with approval, and in any case it has no direct bearing upon the points which are of real importance to us.

† e.g. Vergil, *Georg.* I. 121 f.; Tibullus, I. 8. 85; Dio Cassius, lxxi. 36; Maximus Tyr. xxxvi. 3; Ausonius, xvi. 2. 27 (p. 175, ed. Schenkl).

with the Cyclic Theory. But the Hesiodic version of this *motif*, above all, the primitive association of Kronos with the Golden Age, persisted until a late date, not only in the genuine folk-tradition to which it really belongs, but also, to a large extent, in the literature. In fact, the Golden Age is often designated simply as 'the Age of Kronos,' 'the Days when Saturn was King,' etc.*

THE GOLDEN AGE.—No part of our subject has been so thoroughly investigated by modern scholarship as the Golden Age.† It is, perhaps, the most important element in Hesiod's own account, and, for obvious reasons, the theme was extremely popular in the literary tradition of later times.‡ And, with the exception of certain details to be taken up in another connexion, these descriptions all bear a strong family resemblance to each other. Not less striking is their resemblance to what we hear about Elysium, the Garden of the Gods, the Hyperboreans, and similar conceptions.§ Indeed, as Dieterich has shown in his interesting monograph, *Nekyia*, the traditional *motifs* common to all these themes passed over to the early Christian writers, and were applied by them to their descriptions of heaven.

The main reason for such a similarity is, of course, not far to seek. In all cases, the theme is ideal happiness, and whether we locate it in the past or somewhere in the present, in this world or in the next, the details which make up the vision of unfulfilled desire are, for the average man, very much the same. Nor should we fail to remind ourselves that in the speculations of the folk there is no impassable barrier between our life and the life of those beyond the grave. Nothing was more certain than that the Golden Age and the race who had lived in those happier days had both passed beyond our ken; but that they still existed somewhere, and that, even now, a mere mortal man might be able to find them again, was not felt to be utterly beyond the bounds of possibility. Odysseus had returned alive from Hades, and it is a well-known historical fact that the gallant Sertorius || was, at one time, actually on the eve of setting sail for the Fortunate Isles in the Western Ocean, just as, many centuries later, Ponce de Leon took the same direction in his search for the Fountain of Youth. The same association of ideas is clearly seen in Hesiod's account. In fact, this is one of the most ancient and primitive aspects of the legend. Hesiod's Golden Age, when Kronos ruled a race of men who have since departed, is in all essential particulars a mere replica of Hesiod's Isles of the Blest, where dwell those sons of the gods who have passed alive beyond the grave. Moreover, the foundation of both is material which had long been traditional, even at the time when

* e.g. Plato, *Polit.* 289 A, 271 C, 276 A, *Hippi* 289 B; Philodemus, *de Pisticie*, p. 51; Vergil, *Ecl.* iv. 6; Tibullus, i. 28; Propert. ii. (iii.), 32. 52; Ovid, *Amor.* iii. 8. 35, *Heroid.* iv. 182, etc.

† See esp. Eichhoff, *Jahrbüch. f. Philol.* cxx. 581 ff.; E. Graf, 'ad Aures Etatis Fabulum Symbola,' *Leips. Stud. z. Clas. Philol.* viii. (1886) 1-85; A. Dieterich, *Nekyia*, Leipzig, 1893; E. Rohde, *Psyche*, Leipzig, 1908, i. p. 106 ff.; A. Nutt, *Voyage of Bran*, London, 1895.

‡ The earliest known reference after Hesiod is a line quoted by Philodemus from the old epic, *Atomaeon* (see Kinkel, *Epic. Graec. Fragm.*, Leipzig, 1877, p. 318). Theognis, 1135 ff., is the source of Ovid, F. l. 6. 32. The author of the *Atomaeon*, writing in the 1st cent. A.D., says that descriptions of the Golden Age may be expected from every poet, and are so common that—

'Non cessit cuiquam mellius sus tempora noisse.'

The present writer has noted nearly a hundred references to it during the course of this investigation.

§ The result is that in cases where only a fragment of description has survived, it is sometimes impossible to decide which conception the author had in mind. Compare, e.g., Solon, frag. 88, ed. Bergk; Cratinus, frag. 160, ed. Kock; Crates, frag. 228, ed. Kock; Lucilius, 978 ff., ed. Marx. See also Dieterich's *Nekyia*, and Wasen in Pauly-Wissowa, v. pp. 2470-2475.

|| Sallust, *Hist.* frag. 192, 193, ed. Maurenbrecher; Horace, *Epod.* xvi. 42, and schol.; Plutarch, *Sertorius*, 8.

the Homeric poems were composed.* Indeed, even as Hesiod tells the story, it still reflects with remarkable fidelity the old folk-tale of a Lost Paradise before the simple beauty of the legend had been marred by the intrusion of moral lessons and specific philosophical doctrines. Men lived long, never grew old, and died a painless, i.e. a natural death. Meanwhile, they passed their days like the gods, in innocence, peace, and fabulous plenty, making merry continually, and knowing nothing of labour, disease, or sorrow.

Such are the principal *motifs* of the old legend of the Golden Age, and they usually form the basis of all versions. The variations or additional details which we find in later accounts are, for the most part, due either to philosophical speculation, the incorporation of allied myths, or manipulation for literary purposes.

By far the most important of these is the first. In fact, the growing prominence of the ethical element, the most notable feature in the later development of the Golden Age, is very largely due to the philosophers. The earliest of them were the Orphics of the 6th cent. B.C. The body of doctrine developed by these nameless mystics was probably long the possession of a few, and, when we consider the strange figures of speech in which its real meaning was often concealed, we can hardly wonder that it was long misunderstood or derided by the many. The kernel of it, however, the great idea for which they were slowly preparing, was destined to grow in strength, and, in the far future, to bear abundant fruit. This was the belief that not alone the sons of the gods, but, by a lifetime of merit, the sons of men, might find their reward, even in the dark house of Hades. Naturally, therefore, not only among the Orphics and their disciples, but also among their opponents, the ideal of the Lost Paradise became more and more prominent. Discussion or description of the Golden Age, more especially of its analogue beyond the grave,—the Golden Age, so to speak, of the future—continued to grow in importance and interest. We hear many echoes of it in Plato. But, especially, to the writers of the Old Comedy the Orphics and their doctrines were a never-failing subject for parody and satiric comment.

One of the plainest signs of Orphic influence upon this discussion was the marked improvement in the present position of Kronos. According to the popular belief, old 'King' Kronos had been in the Golden Age a sort of divine *Roi d'Yvetot*, afterwards consigned to nethermost Tartarus, and, ever since then, a synonym of extreme old age and harmless senility.† This view, however, was deliberately opposed by the Orphics. Their teaching was that Kronos had long since been freed from his shameful captivity. Moreover, he is not old and weak. On the contrary, he is for ever young and vigorous, and now rules in Elysium, the land of those who have gone hence. There, in a world of eternal youth and joy, he is surrounded not only by the heroes of old, but also by the spirits of just men made perfect—after the Orphic pattern—and, indeed, as some say, by a remnant of men from those golden days when he was king in heaven.‡

Piety and justice as *motifs* in the ideal of happiness had been ascribed, long before Hesiod's time, to peoples living beyond the limits of the known world. Such were Homer's *Abioi* (Il. xiii. 6), 'the most righteous of men,' and, to give one more

* e.g. Homer, Il. xiii. 5, Od. iv. 85, vii. 201 and 88, iv. 563, vi. 41, ix. 108. See Graf, I.c. p. 4 ff.

† See M. Mayer in Boecker, ii. 1456 ff.

‡ Pindar, *Olymp.* ii. 124, *Pyth.* iv. 291; *Zeuth.* frag. 190, ed. Nauk; Teleclides, frag. 1, ed. Kock; Varro, *de Re Rust.* iii. 1, 5; Horace, *Epod.* xvii. 68; *Orphica*, frag. 245, ed. Abel.

example, the Hyperboreans,* so long famous in the literature and legend of the Graeco-Roman world. This idea was now emphasized in the analogous legend of the Golden Age—the ideal world of the past—and on the basis of it not only the Orphics but other schools of philosophy exploited their specific views regarding the nature of righteousness and the indispensable conditions of happiness. In other words, as the Golden Age ceased to be an article of faith, it became, more and more, the field in which these thinkers aired their theories of what the world ought to be. From this sort of thing it was only a step to that long line of Utopian romances which were quite as characteristic of late antiquity as they are of the present day.†

Among the various bits of specific theory imported into the Golden Age by the philosophers, one of the oldest and most important was the doctrine of vegetarianism.‡ This doctrine doubtless goes back to the elder Orphics, but the most prominent representatives of it in antiquity were the Pythagoreans. The earliest reference to it now surviving is a fragment of Empedocles (127 D), and the most complete discussion of it in connexion with the Golden Age is Ovid, *Met.* xv. 96 f. In this famous passage Ovid introduces Pythagoras himself as the expounder of his own doctrine. The essence of it is that, in the Golden Age, men lived upon the fruits of the earth, and that the degeneration of later Ages is marked by the departure from this rule.

That the Golden Age was distinctively the era of perfect love and peace is easily inferred from Hesiod's account, but the later development is marked by a much stronger emphasis upon this feature. This was partly due to the influence of the Cyclic Theory, in which, as we shall see later, it was the necessary result of the Platonic conception of harmony. The first to lay stress upon it—and probably in this connexion—was Plato's predecessor Empedocles.|| This, no doubt, is the reason why he made Aphrodite instead of Kronos ruler of the Golden Age.

Among those not interested in any cyclic theory—poets, for the most part—the favourite method of bringing out the peace and harmony of the Golden Age was to emphasize the contrast with later times by dilating upon war, violence, and bloodshed as both causes and symptoms of degeneration in the succeeding ages of mankind. This diatribe on war first comes to the front during the Alexandrian age. It is characteristic of Roman poetry, especially of the Elegy, and, in the end, became a mere rhetorical commonplace.¶

Another important line of development in later times was inspired by the varying use and interpretation of one of the most persistent and characteristic peculiarities of the genuine folk-legend. We refer to the belief that in the Golden Age all the imaginable blessings of life come of their own accord. In this way we have an ideal combination of fabulous plenty with luxurious idleness.

* See esp. O. Crusius in Roscher, i. p. 2305 ff., and the references.

† Henkel, *Philologus*, ix. 402, gives a long list, beginning with the *Republic* of Protagoras. See E. Rohde, *Der Gr. Roman*², Leipzig, 1900, p. 210 ff. with references.

‡ See Graf, l.c. p. 20 ff., for an extended discussion, and cf. Porphy. *de Abstinencia*, ii. 21 ff.; Plato, *Ley.* vi. 782; Seneca, *Epiſt.* civili (Sotion); Clemens Alex. *Srom.* vii. 32, etc. For similar ideas in the East, Gruppe (*Gr. Mythol.* p. 448, note 2) refers to Gn 129 216; cf. Windischmann, *Zoroastr. Stud.* p. 212. Connected with this discussion is the old tradition that men talked with the animals in the Golden Age. The references to it are, Orates, 14, ed. Kock; Plato, *Polit.* 273 B; Xen. *Mom.* ii. 7, 18; Babrius, *proem.*

¶ See esp. Schmekel, *de Ovid. Pythag. Adumbrations*, Diss., Greifswald, 1885.

I So, too, Aratus, 108, and freq. in the Roman poets, e.g. Vergil, *Ecl.* iv. 18; *Georg.* i. 125 and ii. 880; Tibullus, i. 10. 7; Ovid, *Met.* i. 97; Seneca, *Her. Et.* 1056; Juvenal, xv. 168; Claudian, *de Raptu Proserp.* ii. 25, *proem.*; Laud. Seren. 70; Sidon. *Apoll. Pan.* 105, etc.

† E.g. Aratus, 131; Vergil, *Ecl.* iv. 82; *Georg.* ii. 540, and Servius; Tibullus, i. 8. 98 and 47; Juvenal, xv. 168; Ovid, *Met.* ii. 90, etc.

When treated seriously, either for literary or for didactic purposes, this motif led directly and inevitably to the conclusion that the ideal condition of human society was communism.* Several commonplaces which the Roman poets inherited from the Alexandrian age might be included here.† We know, too, for example, that this theme was developed at some length by the historian Ephorus in his account of the idealized nations of the North.‡

When treated by the satirists and by other people of a less serious turn of mind, the same motif led quite as directly to one of the most important and interesting developments in the literary history of this legend. This is the treatment of the Golden Age or its analogues in this world and the next as a comic theme. It makes its first appearance in the writers of the Old Comedy, and was primarily intended by them to satirize the peculiar tenets of the Orphics. But the story of Topsy-Turvy Land (*das Märchen des Schlaraffenlandes*, as the Germans call it) was certainly not invented by the Comic Dramatists. It is rather a folk-variation of the old story of the Golden Age, and references to it turn up now and then from the old Comedy of Greece to the present day.§ The comedy in these descriptions is usually produced by pushing the automaton element, occasionally too, the theory of communism, to its perfectly logical, and yet, at the same time, its utterly absurd conclusion. The result is a Lost Paradise of the *bon-vivant*, the votary of ease, and the irresponsible bachelor. The nearest congener of this type is the conception of the Golden Age especially affected by the idyllic-erotic poets of the Alexandrian age and by their Roman imitators. The same automaton and communistic features are prominent, and the examples by which they are illustrated are sometimes so nearly the same that the difference between the two departments is hardly more than a matter of mood.¶ At first sight this is surprising. It ceases to be so, however, as soon as we remind ourselves that the pathetic exaggeration so characteristic of the idyllic-erotic sphere is largely due to the fact that the author himself is rarely more than half convinced of the truth, or even of the possibility, of his own statements. It is an easy step from this state of mind to that ironical extravagance of humorous unbelief—and this, too, has its pathetic side—to which we are indebted for the old tale of Topsy-Turvy Land.

On the philosophical side, the growing distrust of everything in Hesiod's account that savoured of the supernatural served to bring out still another aspect of the Golden Age more and more clearly. Before taking up this point, however, we should remind ourselves that the counter-theory of ascent was, meanwhile, being supported by a party of such activity and intelligence that it could not be ignored.** The theory of ascent was also backed by folk-legends of great antiquity, and for centuries all classes seem to have been interested in discussing the various inventions by which the rise of mankind from utter savagery to our present stage of civilization has been marked.

It is evident that until the account of Hesiod was revised the two parties were utterly irreconcileable. If one did not believe Hesiod, the most

* See Graf, l.c. p. 60, and compare such passages, e.g., as Plato, *Critias*, 110 C, but esp. the *Republic*, 415, 417, 424, 451–465, with the notes and references in the edition of Adam, Cambridge, 1802. Plato went further in this respect than any of his predecessors. He looked upon communism as one of the indispensable conditions of an ideal State, and the reflexion of this view may be seen in what he has to say of the Golden Age.

† Vergil, *Georg.* i. 126; *En.* ix. 569, and Servius; Tibullus, i. 8. 43, ii. 8. 78; Ovid, *Met.* i. 152; Juvenal, vi. 18; Seneca, *Pheas.* 589, *Epiſt.* xc. 41; Justinus, xlii. 1. 8, etc.

‡ Frag. 76 in Müller's *Fragm. Histor. Graec.* vol. i. p. 256.

§ Friedländer, *Sittengesch. Rom.*², i. 537, Leipzig, 1888;

O. Crusius, "Märchenreminiscenzen im antiken Sprichwort," in *Verhandlungen der Akten Philologenversammlung*, 1890, pp. 31–47; Rohde, *Psyche*, i. 215. 2, *Griech. Roman*², p. 206, n. 4; J. Pöschel, *Das Märchen vom Schlaraffenland*. The version best known to us, through numerous limitations, is the one given by the old Trouvère in his lay of the 'Land of Cocagne' (text in Barbasan, *Fabliaux et Contes*, 1784 [new ed. by Méon, 1880, ii. p. 176], tr. by G. L. Way, *Fabliaux or Tales*, etc., London, 1880, i. 8. 45; abstract by Legrand d'Aussy, *Fabliaux ou Contes*, etc., Paris, 1829, i. p. 302).

¶ Teleclides, 1 ed. Kock; *Pherecrates*, 108 K; Cratinus, 165 K; Orates, 14 K; Eupolis, 277 K; Athen. vi. 267 E; Lucilius, 978; ed. Marx; Petronius, 45; Lucian, *Sat.* 7, *Vera Hist.* i. 7, etc.

** Rohde, *Griech. Roman*², p. 216, n. 2; Eichhoff, l.c. p. 587; Graf, l.c. p. 57; Eschylus, *Prom.* 440–455; Moschion, frag. 7, ed. Nauck; Critias, frag. 1, ed. Nauck; Athen. frag. 1, ed. Kock; Democritus, p. 237, ed. Mullach; Aristotle, *Met.* i. 2, and Zeller, *Phl. der Griechen*⁴, i. p. 826; Lucretius, v. 925; Diodorus, i. 8 and ii. 88; Horace, *Sat.* i. iii. 99; Lucian, *Amores*, 33. 34; Aristides, i. p. 32, ed. Dind.; Ovid, *Ara. Amat.* ii. 473; Tibullus, ii. 1. 39; Cic. *pro Sect.* 42; Lobeck, *Aglaophamus*, p. 246 (*Orphic.*)

logical course was to agree with the Epicureans, who denied the account of Hesiod *in toto*, and replaced it by their own view, which is the nearest approach in antiquity to our modern theory of evolution. This denial, which lies implicit in the famous passage of Lucretius (v. 925 f.), is stated positively, for example, by Diodorus, who (i. 8 f.) describes the theory of Epicurus upon this point, and (v. 66 f.) implies that the Golden Age was a mere invention of the Cretans. But this summary disposition of the difficulty is of no value to us. We are more interested in the process of reconciliation. The most important force in this process, so far as it was accomplished at all, was a gradual realization among thoughtful men of the fact that the ideal of life traditionally associated with the Golden Age, though it seemed attractive, was, in reality, unfit to pose as the highest development in any theory of descent.

2. Cynics, Stoicks, etc.—At this point, certain Stoic modifications of Cynic doctrine are of especial value to us. The great representative passage to be considered in this connexion is Aratus, *Phenomena*, 97–140.* The version of the Ages by this famous Alexandrian poet of the 3rd cent. B.C. was one of the best known in the ancient world, and undoubted traces of its influence are to be found in most of the later accounts. Briefly described, it is a revision of Hesiod under Stoic influence. The object of the author was not only to reconcile the discrepancies of the old version, but also to remove whatever was irrelevant to a theme which he proposed to treat not as an independent account, as Hesiod had done, but as a rhetorical episode suggested by his mention of the constellation Virgo, i.e. Astraea, whom Aratus, following an old tradition, identifies with the Nemesis of Hesiod, and calls *Dike*.

Dike was comparatively unimportant in Hesiod. Owing to the exigencies of rhetoric, she now becomes the central figure. Moreover, after the true Stoic fashion, she is made to assume the functions of both Zeus and Kronos in the traditional version. The five ages of Hesiod are reduced to three—an Age of Gold, of Silver, and of Bronze.

The men of the Golden Age are described as peaceful tillers of the soil, with no knowledge of civil strife or of the vexations of the law. Moreover, they were far removed from the perils of the sea. In those days there were no ships to bring the luxuries of life from abroad. The goddess mingled freely with these simple souls, and taught them how men should live with reference to each other.

The Silver Age was more sophisticated. Nevertheless, the goddess still remained upon earth, although she now retired to the mountains, and was seen but rarely.

The Brazen Age saw the first swords, and the first slaughter of the oxen for food. Then *Dike*, utterly hating that race of men, finally departed to heaven and took her place among the stars.

It will be seen that one of the most notable signs of revision here is the disappearance of the old folk-element of marvel. In its place we have a conception in which the Stoicks are mainly responsible for the emphasis laid upon the ethical motif, especially upon the relation of man to his fellows, to the world about him, and to the State.

The underlying principle in such a theory of the Ages is the conclusion that the ascent of man in the arts of civilization is accompanied, at all events beyond a certain point, by a corresponding descent in moral and even in physical fibre. Why is this the case? The reply was that to be healthy in mind and body, and therefore, happy, we must live in harmony with nature. But civilization beyond a certain point is not in harmony with nature. Accordingly, beyond a certain stage of civilization, we can be neither healthy, virtuous, nor happy. Now, as journeying into the future should bring us finally to a state of ideal misery, so journeying into the past should take us back

* Another representative passage is Seneca, *Epist. xc.* 5 ff., in which he quotes from Posidonius the description of an ideal past of the Stoicks, in which the philosophers take the place of Kronos.

finally to a state of ideal happiness. That state of ideal happiness was, of course, the Golden Age. The Golden Age of the past was, therefore, the ideal simple life of the past.

Such in substance was the general drift of the Cynic argument as modified by the Stoicks, and, as a matter of fact, the Golden Age of Aratus is really an idealization of the agricultural and pastoral stage of human society*—a theme which always comes to the front in any period of over-cultivation, as soon as men begin to stagger under the burden of their own inventions. So conceived, the theory of the Ages was not only quite consistent with the evolution of civilization from the crudest beginnings, but agreed with the Epicureans in presupposing such a process. But, as regarded the various inventions and discoveries by which that process has been marked, it loved to dwell upon those very devices, and to lay great stress on the view that they had been the most conspicuous cause of the downfall of man himself. The favourite examples are those chosen by Aratus. They are the first sword and the first ship.

The first sword† is a characteristic introduction to the topic of war which we have already mentioned. The first ship is also a favourite way of connecting the discussion of the Ages with the diatribe on navigation so frequently found in the later writers, especially among the Romans. In fact, it is a commonplace of modern criticism that the Romans were afraid of the sea. As, however, the opinion is a generalization, founded, for the most part, upon these very passages, we need not take it too seriously. The sailor's impious challenge of the treacherous and relentless deep was a subject inspired not so much by national character as by literary tradition. It is fully developed in the *Works and Days* of the old Boeotian poet, a conventional theme of the Greek epigram at all periods, a regular motif in the poetry of the Augustan age, and by the 1st cent. of our era a mere rhetorical commonplace!

In order to understand better the attitude of the Epicureans towards the theory of the Ages, as presented, for example, by Aratus, we must return for a moment to the underlying principle upon which, according to Stoic reasoning, that theory was founded. We mean the conclusion stated above, that advance in the arts of civilization is at the expense of the character, health, and happiness of the individual. Now, when we consider the Stoic argument by which this conclusion was made to yield the theory that the Golden Age of

* Horace, *Epod. ii.*; Propert. iii. 18. 25; Seneca, *Medea*, 333; Plutarch, *de Nibil. 20*, etc. etc. This interpretation of the Golden Age was especially welcome to the Romans, not only because of their temperamental Stoicism, but because it agreed more nearly with their own tradition of early times and with the character and attributes of Saturn before he was identified with the Greek Kronos.

† e.g. Vergil, *Georg. ii. 540*; Ovid, *Met. i. 99*; Juvenal, xv. 168; Tibullus, i. 3. 47. The rhetorical question of Tibullus (i. 10. 1) states a maxim of the philosophers which is often repeated. See, e.g., Seneca, *N.Q. v. 18. 15*: 'Nihil invenimus tam manifesta utilitas quod non in contrarium transeat culpa.' So Ovid, *Met. xv. 106*, speaking in the person of Pythagoras. Opponents of the theory of descent, especially the Epicureans, contended that the sword merely marked one period in the long chronicle of homicide. It was the successor of the club and the large rough stone (Lucretius, v. 966). Cf. also Hor. *Sat. i. 3. 100*; Valer. Flacc. v. 146, and esp. Plato, *Rep. 358 E* (war the natural condition of mankind), and the commentary of Adam.

Among the most important of the numberless references are, Stobaeus, 57 (who gives a number of quotations); Hesiod, *W. and D.* 236; Sophocles, *Antig. 332*; Seneca, *Medea*, 301 and 607; Tibullus, i. 3. 37 and ii. 3. 39; Propert. i. 17. 13 and iii. 7. 29; Ovid, *Amor. ii. 11. 1*; Statius, *Thebaid. vi. 19* and *Achilleid. i. 62*; Claudian, *de Raptu Pros. i. proem.* The final conclusion, after generations of discussion, was that the one great cause of the downfall of man had been his greed and his selfishness. It was clear to the poets and philosophers themselves, especially to the Romans, that all their commonplaces on the fall of man were really just so many illustrations of this one motif. It drove him to war, it suggested the first ship, it urged him on to explore the earth for treasures better hid, it devised the vexations of the law and brought about the injustice of wealth and poverty; through crime and self-indulgence it has made him acquainted with sorrow, disease, and all the ills that flesh is heir to. The result is that he has not only shortened his life by his own devices, but, what with anxiety, dyspepsia, and a bad conscience, with marriage a failure and children a burden, the little life he has left is no pleasure to him.

the past was the ideal simple life of the past, we perceive that it is founded on two assumptions. The first is that this conclusion, that advance in the arts is at the expense of the individual, is a truth of universal application, and not to be modified. The second is that the twin process to which it refers has operated continuously, and will go on doing so. The Stoicks could make these assumptions without hesitation, since both of them followed, inevitably, from that cyclic theory of the Ages to which this school of philosophers gave its enthusiastic support. Not so the Epicureans. The Epicureans agreed that the growth of civilization had been accompanied by certain signs of degeneration in man himself, but they denied that the principle was capable of universal application. They insisted that every stage of civilization, in its own particular fashion, has been unfavourable to the individual. In other ways it has been favourable. There is no such thing, therefore, as progressive degeneration in the strict sense of the word. Such a theory would imply a period of ideal happiness at one extreme, followed by a period of ideal misery at the other extreme. Both are superhuman, and therefore impossible. In other words, there never was a Golden Age, even if we adopt the Stoic revision of the old legend.

Another method of reconciling the difficulties in Hesiod's account is illustrated by Vergil, *Georg.* i. 121 ff. The primary purpose of this version was to enhance the dignity of labour. The history of mankind is divided into two periods—the Age of Saturn, and the Age of Jove. The Golden Age, when good old Saturn was King, agrees entirely with Hesiod. The second period, however, is not an age of degeneration, but an age of reform. Jupiter, the divine father of our race and of all our higher aspirations, purposely did away with the *far niente* of the old régime, not out of a petty resentment against Prometheus—as the old folk-legend (*e.g.* Hesiod, *W. and D.* 42 f.) would have us believe—but rather,

'curis acuens mortalia corda,
Nec torpere gravi passus sus regna veterno.'

because he was well aware that, unless men have difficulties to meet and overcome, they can never grow strong in any sense. In this characteristically noble conception, it is interesting to see to what an extent Vergil succeeded in meeting the demands of contemporary thought without sacrificing the traditional account of the Golden Age so dear to the poets.

The famous account of the Ages which Ovid gives in the first book of his *Metamorphoses*, 89–162, and the version best known to the modern world, is one of the earliest surviving attempts to incorporate the Flood Legend. Otherwise, it is chiefly remarkable as an illustration of the poet's characteristic skill in combining and harmonizing the views of preceding thinkers. The Four Ages (Gold, Silver, Bronze, and Iron) are all in the past. The Age to which we belong is a fifth. The Flood is the great catastrophe by which the wicked and godless race of the Iron Age was destroyed. The history of our own race, therefore, begins with the earth-born children of Deucalion and Pyrrha. In this way, the Flood Legend, the theory of descent, the theory of ascent, the traditional account of the Golden Age, the Heroes, and, with only a slight modification, even Hesiod's quintuple division of the Ages, were all made to dwell together in peace and unity.

CYCLIC THEORY.—Let us now turn our attention to the Cyclic Theory, the most important element, in the long run perhaps the one really vital and vitalizing element, in the history of our subject. The Cyclic Theory of the Ages was founded on the belief that, after the analogy of day and night,

of the waxing and waning of the moon, and of the eternal round of the seasons, the entire Universe itself is subject to an ever-recurring cycle of change. This ancient Babylonian doctrine⁴ of the world-year, the *magnus annus*, as it was called by the Romans, makes its earliest known appearance on Greek soil with Heraclitus,[†] was thoroughly discussed by the later philosophers, and finally became known to the world at large. Indeed, it may be called the prototype of some of our most recent views suggested by the nebular hypothesis.[‡] The association of this idea with the old folk-legend of the Ages was inevitable, and appears at a very early period in the history of Greek speculative thought. In fact, it has often been stated, though without sufficient warrant, that belief in a cyclic theory of the Ages is the explanation of Hesiod's wish that he had died earlier or could have been born later.[§] The fragments, however, of Empedocles show, in spite of their scantiness, that at that time the process had already begun.^{||} But the most important discussion, so far as we are concerned, the one, too, which had the strongest influence upon later times, is developed or touched upon in various dialogues of Plato,[¶] more especially in the *Polit.*, *Timaeus*, and *Republic*.

According to Plato's definition,—and this much, at least, appears to have remained unchanged in later times—a *magnus annus* means the period which elapses before the eight circles, each revolving about the earth in an orbit of its own, arrive simultaneously at the point from which they started at the beginning of our cycle.^{**} Further details of the Platonic theory—and these underwent considerable revision in later times—apparently rest on the assumption that each complete revolution of the Universe is followed by a counter revolution in the opposite direction. A motion forward, as it were, is followed by a motion backward. The history of mankind is directly affected by this motion, and especially by the alternation of it.

The motion forward is the Age of Kronos and the direction of harmony. During all this period the great Helmsman of the Universe is at his post, and we have the Golden Age of the poets. As the motion is the reverse of that which prevails in our time, it is naively assumed that the conditions of life are to a large extent the opposite of those with which we are familiar. The men of that age are born old, with hoary hair,^{††} and instead of growing older continue to grow younger, until they finally disappear. Moreover, they are born from the earth, and the earth feeds them. There is no toll, no pain, no war, there are no women;^{‡‡} and no children of women. Yet with all their advantages these men do not attain unto wisdom.

When the forward motion is completed, the Helmsman retires from his post, and the Universe, left to itself, yields to the force of gravity, as it were, and begins its backward revolution, which is in the direction of discord. The point at which the motion is reversed is always signalized by fire, flood, or some other cosmic upheaval, involving a terrific destruction of organic life. The few men who survive cease growing young and begin to grow old, those just born from the earth with hoary hair die, and return to the earth from which they came. Men are no longer born from the earth, as before, but even as

* Gompertz, *Griech. Denker*, Leipzig, 1896, i. p. 115, with note and references on p. 488; Lenormant-Babelon, *Hist. de l'Orient*, v. 176; *supra*, p. 188 ff.

† Gomperz, *l.c.* pp. 54 and 428; Diels, *Herakleitos von Ephesos*, Berlin, 1901, frag. 66 (26, Bywater).

‡ Gomperz, *l.c.* p. 117.

§ Hesiod, *W. and D.* 174–5. See the editions of Rzach, Leipzig, 1902, p. 168, and of Goettling-Flach, Leipzig, 1878, p. 201, with notes and references; Graf, *l.c.* p. 11; Schoell-Studemund, *Anecdota Graeco-Latina*, II.

|| Diels, *Postarum Philosophorum Fragmenta*, Berlin, 1901, pp. 88 and 112 ff.

¶ Plato, *Polit.* 269 C, *Tim.* 39 D ff., *Rep.* 545 C ff.; Cic. *Timaeus*, 34 ff. For a good discussion of this theory and of the Platonic Number with which it is closely associated, and also for a selected bibliography of the enormous literature which has gathered about it, see Adam's ed. of the *Republic*, II. p. 264 ff.

** *Tim.* 39 D; Cic. *Timaeus*, 33; Macrobius, *Som. Scipionis*, II. 2, 19; Stobaeus, *Ecol.* I. 264 (vol. i. p. 107, Hense). See esp. Usener, *Rhein. Mus.* xxviii. 396; Ritter and Preller, *Hist. Philos.* Graec., Gotha, 1888, p. 404; Reitzenstein, *Pomanders*, Leipzig, 1904, p. 50, n. 2.

†† The likeness to Hesiod, *W. and D.* 180 ff., has been pointed out and discussed by Adam in the *CIR* v. 445.

‡‡ *Polit.* 271 F; *Leg.* iv. 718 C ff. It has been observed by Eichhoff (*l.c.* p. 589) and others that the story of Pandora as told by Hesiod (*Theog.* 570, and *W. and D.* 70) implies that there was no woman in the Golden Age, and that it was through her that this happy period came to an end. See also, Grimm, *Deutsche Mythologie*, p. 540.

the Universe is now left to itself, so are all and several of its parts; and each race is propagated in the manner familiar to us who belong to that period. The continuance of the motion backward increases and accelerates the process of disorganization, until, by the time the Universe again reaches the point of departure, it is ready to fly off at a tangent and disappear for ever in the infinite space of discord. At this point, however, the Helmsman again resumes his post, reverses the direction of the Universe, and with the change again to harmony the Golden Age necessarily returns as before. The few who survive from the preceding period suffer change in sympathy with the whole. Again the old begin to grow young, and continue to do so until they finally disappear. Again the new generations are born with hoary hair, and not from each other, but from the earth. In fact, it is those who died in the preceding period of discord and were buried in the earth that now rise again from the dead, and in their turn are born old, grow young, and finally vanish.

It will be seen at once that, according to this remarkably suggestive theory, which, of course, owes much to earlier thinkers,* the sum of human experience is measured by two world-years. During the first the Universe moves forward, during the second, backward, to the place of beginning. Each *magnus annus* is therefore one of the two Ages into which the history of mankind is divided; and this alternation of Ages will continue so long as the Universe endures. As with the whole, so with each and all of its parts. The Ages of man, the life of man himself, are closely connected with this eternal oscillation of the Universe. All move in a cycle. The Golden Age of the long ago will surely come again some day. Moreover, every one of us shall rise again to another life in that Golden Age. Thus, regret for the past was balanced by hope for the future. In the later history of our theme, this association of ideas was of the utmost importance, and served to identify the theory of the Ages more and more closely with its ancient analogue, the doctrine of a future life beyond the grave.

The Stoic theory† of cycles occupies an important place in their systems. Here, their acknowledged dependence upon Heraclitus is clearly seen in the prominence they give to his doctrine of *έκτιπτος*, the elemental fire into which the world is periodically resolved, and from which it is periodically born anew.

After the old world has been completely consumed, the four primal elements,—fire, air, water, earth,—which are indestructible, gradually assume their previous relations to each other, and in this way a new world comes into being exactly like the old. As soon as the proper point is reached in the process of reconstruction, every sort of living thing is born from the earth, and from that time proceeds to increase after its kind. Man, too, is here, ‘knowing nothing of wrong and born under better auspices.’ But this Golden Age of innocence is never for long. ‘Villainy steals on apace. Virtue is hard to find out: it needs a leader and a guide. The vices are learned without a master.’‡ So the process of degeneration goes on until the time comes for the next *έκτιπτος*. Then the world is destroyed and built anew, as before.

An *έκτιπτος* occurs each time that the eight circles are in conjunction at the place of beginning.¶ For the Stoics, therefore, every *magnus annus* is the measure of one complete life, as it were, of the Universe. It follows that the totality of human experience must, also, lie between those impassable barriers of flame by which every great year is divided from its fellows. The soul outlives the body, but even the soul of the ideal Stoic ¶ cannot survive the *έκτιπτος*. Nothing emerges from this trial by fire except the primal elements from which all things are made.**

In one sense, however, we all have a personal interest in every period of the world's existence, for the reason that,

* See the two preceding notes, and Adam, *Repub.* ii. p. 296, n. 6, p. 297, n. 1-4, and references.

† Ritter and Preller, l.c. pp. 28 ff. and 398-405; Zeller, *Grundriss der Gesch. der Gr. Phil.*, Leipzig, 1905, p. 214; Zeno, frag. 107-109, and Chrysippus, frag. 598-632, in van Armin's *Stoicorum Veterum Fragmenta*, Leipzig, 1905.

‡ Cleanthes, frag. 497, ed. van Armin.

§ Seneca, N.Q. iii. 30. 8.

¶ Nemes. *de Nat. Hom.* 38 (quoted by Ritter and Preller, l.c. p. 404).

** Diog. Laert. vii. 156 says that ‘the Stoics claim that the soul is the spirit which is a part of ourselves. It is, therefore, corporeal, and though it survives our death, it is not immortal. . . . Cleanthes, therefore, thinks that all souls, Chrysippus, that only souls of the “wise,” last until the *έκτιπτος*.’ Cf. also vii. 151; *Doxographi Graeci*, 393, ed. Diels, etc.

** But see Ritter and Preller, l.c. p. 401 B.

according to the Stoic doctrine of *ειμαρμένη*,* the history of every *magnus annus* is, necessarily, the exact counterpart of the history of every other *magnus annus*. The chain of existence and of consciousness is parted by the *έκτιπτος*; but all begins anew, just as it did in the previous epoch; and every thing down to the slightest detail is exactly repeated.† To quote a favourite illustration of the Stoics themselves, every *magnus annus* will see Socrates. In every *magnus annus* he will marry Xanthippe, drink the hemlock, and die.‡

In the later stages of the Cyclic Theory we have also to reckon with the manipulations of the Orphic philosophers.§ It is extremely difficult to extract a definite answer to any question connected with the history of this movement. The *floruit* of the elder Orphics was not far from the 6th cent. B.C. With the great revival of Mysticism, four or five hundred years later, the old doctrine of the Orphics again came to the front, and was more or less revised or extended in conformity with similar ideas in other systems of thought—more especially Plato, the Stoics, and the Orient. Both periods were characterized by great literary activity. Unfortunately, however, our present knowledge of it is, for the most part, confined to chance quotations in the Neo-Platonists and the still later scholiasts, and their references are generally so vague and indefinite that, in the absence of other testimony, it is often impossible to distinguish the earlier product from the later. We may be fairly certain, however, that the two following theories, both of which are ascribed to the Orphics, are not a product of the earlier school.

The first is mentioned by Servius on Vergil, *Ecl.* iv. 10. In this note, Nigidius Figulus (*de Dis*, lib. iv.) is quoted for the statement: ‘According to Orpheus, the ruler of the First Age is Saturn; of the Second, Jupiter; of the Third, Neptune; of the Fourth, Pluto.’ An apparent reference to the same theory is found in two hexameters quoted from some Orphic poem by Lactantius, *Instit.* i. 18. 11 (Abel, *Orphica*, frag. 243).

As we shall see shortly, the four gods in this system are merely personifications of the four elements. The number points either to the Stoics or to the common source of both. Moreover, the formal association of the four elements with the Four Ages of man is an item of speculation which, so far as the Greeks are concerned, cannot be carried back beyond the Alexandrian period. Finally, this is certainly a cyclic theory, and it cannot be shown that the elder Orphics ever carried their doctrine of the re-birth of the soul any further. The extension of it to a periodical re-birth of the Universe itself, and the establishment of a close connexion between the two, belong to a subsequent development in the history of the Orphic movement.

The second theory is much more Orphic in character. The substance of it is given by Proclus in a note on Plato's *Republik*, 38. 5, ed. Schöll.

‘The theologian Orpheus,’ he says, ‘taught that there were three Ages of man. The first or Golden Age was ruled by Phanes. Most mighty Kronos was ruler of the second or Silver Age. The third is the Titanic. The ruler of it is Zeus, and it is called Titanic because the men of that age were created by him from the remains of the Titans. The idea of Orpheus is that these three periods comprise every stage in the history of the human race.’

The Orphic elements in this account receive their best illustration from an Orphic theogony, the fragments of which are arranged and discussed by Gruppe in Roscher, iii. 1189 ff. The naive crudity of the imagery in this poem strongly reminds one of the teleological speculations of the savage or semi-barbarous races.¶ The underlying thought, however, seems to be clear enough. It is a belief that the creation of the Cosmos was brought about by a series of emanations from the universal essence (Phanes), and that from time to time the Cosmos returns to its primeval form. The souls of men themselves are so many sparks which trickle down, as it were, from the divine fire above. But we are much more remote from the first Phanes, the primal All-Soul, than the first men were. Since then the backward path has steadily grown longer and more indirect. At all events, this seems to be what Proclus means when he says (*Orph. frag. 244*, ed. Abel) that, according to Orpheus, the men of the Golden Age lived καὶ πού πότερον, the men of the Silver Age καὶ τὸν καλεόμενον Λόγον; whereas all that we can appeal to is that small portion of Dionysus-Phanes which the

* Diog. Laert. vii. 147 ff., and Ritter and Preller, l.c. p. 412.

† Eudemus, ed. Spengel, Berlin, 1866, pp. 73-74; Chrysippus, frag. 623-627, ed. van Armin; Gomperz, l.c. pp. 113 and 116 ff.

‡ Nemes. *de Nat. Hom.* 38.

¶ See esp. O. Gruppe in Roscher, iii. 1117-1154, who discusses the subject at length, and refers to all the important literature connected with it. A new edition of the Orphic remains is much needed. The latest edition, and the only one now generally available, is Abel, *Orphica*, Leipzig, 1885. This, however, is not entirely satisfactory, and does not supersede the monumental work of Lobeck (*Aglaophamus*).

|| See Gompers, l.c. pp. 193 and 109 ff.

Titans had eaten before they were slain by Zeus, and which, therefore, still lingered in the remains from which we of the third race were afterwards created.

The coefficient of descent in this version of the Ages is the ever-increasing distance from that to which the gods themselves owe their being. On the whole, we may characterize the account which Proclus summarizes as a theory of double emanation, the chief object of which was to lead up to the birth of Dionysus, the Orphic redeemer. In other words, we have the somewhat vague idea of a cyclic theory of the Universe attached to a much more highly developed doctrine of the re-birth of the soul and of the means whereby it may some day return to the god who gave it.

The doctrine of an *ekrisposis*, irrespective of its philosophical meaning, makes a strong appeal to the imagination. It was at all times, therefore, one of the most prominent features of the Cyclic Theory. By the 2nd cent. B.C., owing to the widespread activity of its most enthusiastic exponents, the Stoic popular preachers, no item of philosophical speculation could have been more familiar to the average man. Finally, together with much else that had been identified with the Stoics, it passed over to the Christian thinkers; and, long after the period with which we are here concerned, we find the Church Fathers undertaking to derive the doctrine of the *ekrisposis* from the Book of Genesis.*

But, long before the Stoics, the *ekrisposis* had begun to be associated with other great cosmic disasters of a different nature. The origin and progress of this development are better understood as soon as we observe the process of reasoning by which they were inspired and directed. In the first place, the cycle of the Universe had been called a year. This led to the natural but quite illogical assumption that, for that very reason, it must necessarily possess all the attributes of its prototype and namesake, the solar year. Second, the present condition of the world depends upon the maintenance of the elements in a certain state of equilibrium. Any disturbance of it is at once reflected in the world about us. If the disturbance is sufficiently severe, the result is cosmic disaster. The character of the disaster is determined by whichever one of the elements has gained the upper hand. Finally, great significance was attached to the fact that there were four Elements, four Seasons, four Ages of man.

The conquests of Alexander drew the East and the West closer to each other than they had ever been before, and this *rapprochement* was not disturbed by the Imperial policy of Rome. The phase of our subject now under consideration is especially marked by the more or less direct influence of Oriental speculations. Conversely, therefore, this aspect of the Cyclic Theory did not become especially prominent until the Alexandrian age. The first step was to associate the Flood Legend with the Cyclic Theory, and to set it over against the *ekrisposis* as a second recurrent catastrophe of the *magnus annus*. This doctrine of the regular alternation between a destruction by fire and a destruction by water was already an old story in the time of Plato (*e.g.* *Tim.* 22, C). There are no signs of this doctrine in the fragments of Zeno, Cleanthes, and the earlier Stoics. We know, however, that it was familiar to their contemporaries. Moreover, as early at least as Cicero's time, the doctrine had been adopted by the Stoics themselves, and henceforward we hear much of it.† Compare, for example, the vivid description of the great cyclic *diluvium* which Seneca gives us in his *Nat. Quast.* iii. 27 ff.

The idea that these two contrasted disasters occur at certain definite points in the *magnus annus* is also of Oriental origin, and, doubtless, of a high antiquity. On the Greek side, the first

to mention it is Aristotle. The quotation, which we owe to Censorinus, xvii. 11, was probably from Aristotle's lost *Protept.*, the model of Cicero's famous dialogue, the *Hortensius*, which is also lost.* No doubt it was largely through the *Hortensius* that the Romans became familiar with Aristotle's observation that the two disasters of the *magnus annus*, or, as he termed it, the *mactimus annus*, occur at the solstices: the *conflagratio* at the summer solstice, the *diluvium* at the winter solstice.† In other words, the solar year has solstices; it also has summer and winter—the one, hot and dry, the other, cold and wet. Therefore the great year has the same peculiarities. This being granted, the *conflagratio* is put in the great summer, simply because the great summer is hot and dry, and the *diluvium* in the great winter, because the great winter is cold and wet.

We should not expect this sort of logic from Aristotle, and, as a matter of fact, the idea was not his own. Indeed, as the *Protept.* was a discussion in the form of a dialogue, we do not know that he approved of the view at all. That his information went back to some Eastern source is indicated by a fragment from the voluminous history of his much younger contemporary, the Chaldean priest Berossus. The passage is quoted by Seneca, *Naturales Quæstiones*, iii. 29. 1 ff. 'Berossus,' he says, 'qui Belum interpretatus est,' insists that he can set the time for the *conflagratio* and the *diluvium*. The earth will burn up, he claims, when all the stars, which now move in different orbits, are in conjunction in the constellation of Cancer. The Flood will take place when the same stars reach conjunction in the constellation of Capricorn. 'Ilico solstitium, hic bruma conficitur.' Conjunction in Cancer produces the *conflagratio*, conjunction in Capricorn the *diluvium*. This touch of astrology makes the statement very impressive, and these Chaldeans were nothing if not impressive. But, as Gompers has already observed,‡ the actual foundation of the statement is nothing but the fact that the summer and winter solstices of the ordinary solar year are presided over by Cancer and Capricorn respectively. When this flimsy assumption of profundity is removed, the theory of Berossus is probably identical with the one mentioned by Aristotle.

Now that fire and water had acquired a definite and important position in the cyclic scheme, it followed inevitably that the two remaining elements, air and earth, ought to be put on the same plane. The line of development followed was largely suggested by the fact that there were four Elements, four Seasons, four Ages of man. The four seasons of the ordinary year are spring, summer, autumn, and winter—a series which has always been associated with man's own descent from youth to hoary old, from strength and happiness to weakness and sorrow. So the four seasons of the great year are the four Ages of man, another series with which the idea of descent had always been associated. As the springtime of the little year of our life is the golden youth of man, so the springtime of that greater year was the golden youth of all mankind.§ Finally, the traditional order of the four elements—fire, air, water, earth—is also one of descent from the lighter to the heavier, from pure spirit to the earth, earthly.

If, now, we associate the four elements in their regular order with the corresponding Ages of man in their regular order, the dominating element during the Golden Age will be fire, during the Silver Age, air, during the Brazen Age, water, and during the Iron Age, earth. The conclusion of this is that the descent of man himself is due to his ever-increasing distance, so to speak, from the Divine fire. We are thus brought back to the Orphics again, and, as a matter of fact, the Stoic-Orphic theory reported by Nigidius Figulus, in which, as we have already seen, the *magnus annus* was equipped with four seasons, each ruled by the appropriate element, is a complete illustration of the tendencies we have just been discussing.

A theory ascribed to the Magi by Dio Chrysostom and partially reported by him (xxxvi. 48 ff.), should also be mentioned here. The Magi tell us, he says, that the Lord of the world rides in a chariot drawn by four horses which are sacred to Zeus, Hera, Poseidon, and Hestia respectively. In other words, the four horses are the four elements, fire, air, water, and earth. As a rule they are tractable. Now and then, however, the first steed becomes restive and sets fire to the other three. This is the origin of the story of Phaethon told by the Greeks. Again it is the steed of Poseidon that becomes

* See Windischmann, *Zoroastr. Stud.* p. 259.

† Cic. *Rep.* vi. 28, cf. Macrobi. *Som. Scip.* ii. 10. 10 ff.; Lucret. v. 888; Lucr. vii. 812, as interpreted by the *Commentarii Lucant.* ed. Usener, p. 252 (frag. 606, vol. ii. p. 186, ed. van Arnim); Seneca, *Dial.* vi. 28, 6, etc.

* Usener, *Rhein. Mus.* xxviii. 891 ff.

† For an echo of this statement see the *Meteorologica*, i. 14.

‡ Griechische Denker, i. 115.

§ Vergil, *Georg.* ii. 336 ff.; Ovid, *Met.* i. 107; *Pervigilium Veneris*, 2 ff. etc.

restive, and the drops of his sweat are sprinkled upon the other three. This, again, is the source from which the Greeks derived their story of Deucalion's flood.

If one were to insist upon completing the analogy between the four Elements, the four Ages of man, and the four Seasons of the great year, the Ages presided over by air and by earth, as was already the case with the Ages of fire and water, should each be marked by a cosmic disaster appropriate to its nature. We know that this was actually done, but as these attempts lie outside the sphere with which this article is concerned, they do not require discussion here.*

3. Revival of Mysticism in 2nd cent. B.C.—The last important stage in the long history of our subject is the era of the prophets. The rapid growth of Mysticism which began early in the Alexandrian age reached its culmination in the 2nd cent. B.C. One of the most striking features of the movement, and a significant comment upon the mental and spiritual condition of the entire Graeco-Roman world, was the rapid production of apocryphal works. It is probably fair to assume that the production of this literature was much encouraged, if not actually suggested, by the then widespread belief that the life of mankind moves in cycles. At all events, one of the most characteristic features of all these visions and prophecies was the emphasis given to some cyclic theory of the Ages. It would be quite unnecessary here, even if they were still available to us, to examine these works in detail. Their chief importance to us would be derived not from their contents, but from the point of view which, by virtue of their very nature, they all possess in common. These visions and prophecies, like all other works of the same class, appealed more to faith and the emotions than they did to reason and the understanding. The author tells his readers that this last Age has nearly run its course, and that the great change is near at hand. He does not state it as an opinion or a theory, capable of being discussed as such. He states it as oracular utterance, as inspired prophecy, the truth of which is already foreshadowed in current events and cannot be questioned. In this way the Cyclic Theory of the Ages was transformed from a rhetorical and philosophical theme into a Divine assurance of the joy soon to come. As a class, these compositions contributed almost nothing to the development of the Cyclic Theory itself. A word or two, however, should be given to the Sibyl.

The *Oracles of the Sibyl* have been ascribed to about the middle of the 2nd cent. B.C. They were well known to the Romans for the next 200 years; but at the time when the collection now bearing that name† was composed, the earlier had apparently ceased to exist. Meanwhile, however, they had won a sort of secondary immortality through the influence they had exerted upon the fourth *Eclogue* of Vergil;‡ the most famous literary work ever inspired by any aspect of our theme. From this poem and the ancient comment upon it, it appears that the Sibyl adopted the Stoic-Orphic identification of the Four Ages of man with the four seasons of the *magnus annus*. In addition to this, she—or her authority—was inspired by the analogy of the ancient solar year to divide the great year into ten great months, each of which was the length of a *sæculum* and presided over by

* O. Gruppe, *Gr. Mythol.* p. 450, n. 1, also his *Gr. Kulte und Mythen in ihren Beziehungen zu den orient. Religionen*, Leipzig, 1887, p. 670, n. 8, and 696, n. 22, with references.

† The two modern editions of the *Oracula Sibyllina* are by Reisch, Vienna, 1891, and by Geffcken, Berlin, 1902. See also Christ, *Gesch. der Gr. Lit.*, Munich, 1906, p. 823, and references.

‡ O. Gruppe, *Gr. Kulte*, etc., p. 687 ff., and references: A. Cartault, *Etudes sur les Boucliers de Virg.*, Paris, 1897, p. 210 ff.; W. W. Fowler, *Harvard Studies*, xiv. 19 ff. etc.

a god. Ever since the time of Sulla there had been rumours afloat that the Sibyl's last *sæculum* was drawing to a close, and that the Golden Age was at hand. One cannot read the fourth *Eclogue* without feeling that Vergil was himself impressed by a prophecy so much in harmony with the aspirations of his own lofty soul. Nevertheless, we must not forget that the poem is really a poem of congratulation upon the birth of a son, into which, as Marx has clearly demonstrated,* Vergil introduced the topic of the Ages in accordance with the specific suggestion of the rhetoricians for poems of this type, and developed it in strict conformity with the rules laid down by them. The most famous line in the poem,

'Iam nova progenies eisdem demittitur alto,'

is a clear reflexion of the cyclic theories which we have just been discussing. That, in itself, it should also foreshadow quite as clearly the great central article of the Christian faith, is an excellent illustration of the fact that there has never been any break between ancient and modern culture. The foundation of the most enlightened Christian thought, quite as much as the foundation of Vergil's thought, was that gradual blending of the Orient with the speculations of the Greek philosophers, more especially Plato and the Stoics, which moulded the doctrine of the Ages in its final form, and which, ever since then, has played such an important part in the mental and spiritual consciousness of the civilized world. It is, therefore, no matter for surprise that for more than 1500 years this last great document in the long history of the Cyclic Theory of the Ages was firmly believed to be a prophecy of the coming of Christ.†

KIRBY FLOWER SMITH.

AGES OF THE WORLD (Indian).—The Hindu doctrine of the Ages of the World (*yugas*) is combined with that of two other great periods, the *manvantaras* and *kalpas*, into a fanciful system of universal chronology, which passes for orthodox. Its basis is the *yugas*; they are, therefore, treated here in connexion with the other elements of the chronological system. Orthodox Hindus recognize four Ages of the World (*yugas*), roughly corresponding to the Gold, Silver, Brass, and Iron Ages of the ancients. They are called *kṛta*, *tretā*, *dvāpara*, and *kali* after the sides of a die; *kṛta*, the lucky one, being the side marked with four dots; *tretā* that with three; *dvāpara* with two; *kali*, the losing one, with one dot. These names occur in the period of the Brāhmaṇas as names of throws at dice, and in one verse of the *Aitareya Brāhmaṇa* (7, 14) they are already referred, by the commentator, to the *yugas*. In the epics and the Purāṇas the belief with regard to the four *yugas* has become a fully established doctrine. The general idea, the same in all Brāhmaṇical sources, is that the character, or, if the expression may be used, the proportion of virtue, and the length of each *yuga* conform to the number on the side of a die, after which it is named. In the *kṛtayuga*, virtue (*dharma*) was fully present in men, with all four feet, as it is expressed, but it diminished by one quarter or foot in every succeeding age, till in the *kaliyuga* only one foot of *dharma* remains. The same proportion holds good with regard to the duration of the several Ages. The *kṛtayuga* lasts 4000 years, to which a dawn and a twilight of 400 years each are added; the same items in *tretā* are 3000 and 300, in *dvāpara* 2000 and 200, in *kali* 1000 and 100 years. Thus the period of the four *yugas* together, technically called a *mahāyuga* or *chaturyuga*, though commonly a *yuga*, lasts 12,000 years (Manu, i. 69 ff. =

* F. Marx, *Neues Jahrbüch. f. das klass. Altertum*, i. (1898), pp. 106–128.

† Comparetti, *Virgilio nel medio eto*, 1896, i. 129–128, and ii. 90–99; Mayor, etc., *Virgil's Messianic Eclogue*, 1907.

Mahābhārata, iii. 12,826 ff.). The years in this statement are interpreted as Divine years, consisting each of 360 human years, giving thus a total of 4,320,000 years in each *mahāyuga*, and this interpretation, once adopted in the Purāṇas, became a dogma. The usual descriptions of the *kṛta-* (or *satya-*) *yuga* reveal to us a happy state of mankind, when life lasted 4000 years, when there were no quarrels nor wars, when the rules of caste and the precepts of the Vedas were strictly obeyed, when, in short, virtue reigned paramount. In the *kali-* (or *tīṣya-*) *yuga* just the reverse prevails. There is a confusion of castes and *āśramas*. The Veda and good conduct gradually fall into neglect; all kinds of vices creep in; diseases afflict mankind; the term of life grows shorter and shorter, and is quite uncertain; barbarians occupy the land, and people kill one another in continual strife, till at the end of the *yuga* some mighty king extinguishes the infidels. From these extremes the character of the intermediate *yugas* may be imagined.* The dawns and twilights of the several Ages are periods of transition from one Age to the next, when the character of the one is not yet entirely lost, and that of the other not yet fully established.

It seems natural to presume that originally the *mahāyuga* comprised the whole existence of the world; indications, indeed, of such a belief are not wanting, as will be noticed later. Still, the common doctrine is that one *mahāyuga* followed on another, one thousand of them forming a single *kalpa*. The *kalpa*, then, is the length of time from a creation to a destruction of the world. The belief in periodical creations and destructions of the world is very old; and its existence in the Vedic period may be inferred from Atharvaveda, x. 8. 39, 40. It is combined as follows with that in the four Ages. In the first *kṛtayuga*, after the creation of the earth, Brahman created a thousand pairs of twins from his mouth, breast, thighs, and feet respectively. They lived without houses; all desires which they conceived were directly fulfilled; and the earth produced of itself delicious food for them, since animals and plants were not yet in existence. Each pair of twins brought forth at the end of their life a pair exactly like them. As everybody did his duty and nothing else, there was no distinction between good and bad acts. But this state of things changed at the end of the Age; the first rain fell and trees grew up. These produced honey and whatever the primitive people desired. In the first *tretāyuga*, mankind consisted no longer of pairs of twins, but of men and women. Being now for the first time subject to cold and heat, they began to build houses, and they quarrelled about the miraculous trees. The trees, however, disappeared, and herbs became the food of men. Now trade was introduced, and personal property, unknown before, caused the social distinctions. Then Brahman established the four castes and the four *āśramas*, and fixed the duties peculiar to each of them. Afterwards he created spiritual sons, who were the ancestors of gods, demons, serpents, inhabitants of hell, etc.† At the end of the last *kaliyuga* of a *kalpa*, the heat of the sun becomes fierce and dries up the whole earth; and by it the three worlds are set on fire and consumed. At last enormous clouds appear and rain for hundreds of years, and deluge the whole world till the waters inundate heaven.‡ As the latter signs are frequently alluded to, in the form of similes in the Epics, etc., as occurring at the end of a *yuga* (instead of at the end of a *kalpa*), it is most probable that originally the *yuga* ended with the destruction,

* Cf. J. Muir, *Original Sanscrit Texts*, vol. i. p. 148 ff.
† Vāyu Purāṇa, i. 8.

‡ Vāyu Purāṇa, vi. 3 ad.

and consequently began with the creation of the world. A similar belief seems to have been expressed by the term 'kalpa,' but perhaps with this difference, that the concept of a *yuga* was intimately connected with the idea of the four stages through which mankind must pass, analogous to the four ages of man, viz. childhood, youth, adult life, and old age, while this idea was not necessarily implied in the concept of the *kalpa*. The combination of both these popular beliefs, with regard to the *kalpa* and the *yuga*, in the form described above, was probably due to the systematizing efforts of the Paurāṇikas.

There is still a third kind of long period, the *manvantara*, fourteen of which go to the *kalpa*. Each *manvantara* contains 71 *mahāyugas*, and 14 *manvantaras* are therefore equivalent to 994 (14×71) *mahāyugas*. The remainder of 6 *mahāyugas* required to make up the *kalpa* (=1000 *mahāyugas*, sup. p. 200) is so distributed that the first *manvantara* is preceded by a dawn of the length of one *kṛtayuga* (=0·4 *mahāyuga*), and each *manvantara* is followed by a twilight of equal length ($15 \times 0\cdot4 = 6$ *mahāyugas*). The twilight of the *manvantara* is, according to Sūrya Siddhānta, i. 18, a deluge (*jala-plava*). This artificial system of the *manvantaras* was probably introduced in order to account for the different patronymics of Manu, such as Vaivasvata, Svāyambhuva, Sāṁvarana, which occur already in different Vedic works. These early caused a belief in the existence of several distinct Manus.* The Paurāṇikas systematized these notions as described. Since Manu was thought to have introduced the social and moral order of things, and to have played a part in the creation of gods and men, 'the seven Rāgis, certain (secondary) divinities, Indra, Manu, and the kings, his sons, are created and perish' in each *manvantara*;† and the details of these recurring events in each *manvantara* are given, e.g., in the same Purāṇa.‡ Artificial as these *manvantaras* appear to be, still they are given as one of the five characteristic topics of the Purāṇa in a verse found in several Purāṇas.§ And the whole system of *yugas*, etc., is regarded as orthodox to such a degree that all the astronomical works, the Siddhāntas, have adopted them, except the Romaka Siddhānta, which for that reason is stigmatized as not orthodox.||

The astronomical aspect of the *yuga* is that, in its commencement, sun, moon, and planets stood in conjunction in the initial point of the ecliptic, and returned to the same point at the end of the age. The popular belief on which this notion is based is older than Hindu astronomy.¶ The current *yuga* is the 457th of the present *varāha-kalpa*, or *kalpa* of the Boar, the 28th of the present *manvantara* (that of Manu Vaivasvata), which itself is the 7th of this *kalpa*. We are now in the *kaliyuga*, which began Feb. 17, B.C. 3102, the epoch of the still used era of the *kaliyuga*. At the end of the last *tretāyuga* lived Rāma, the son of Dāśaratha, and at the end of the last *dvāparayuga* took place the great war of the Pāṇḍavas and Kauravas, described in the Mahābhārata.

A *kalpa* is called a day of Brahman, and his night is of equal length. At the close of the night he creates the world anew. Of such days and nights a year of Brahman is composed; and a hundred such years constitute his whole life. This longest period is called a *para*, half of which, a

* Cf. SBE xxv. p. lxiv f.

† Wilson, *Vāyu Purāṇa*, i. p. 60.

‡ Wilson, i.e. iii. p. 1 ff.

§ Wilson, i.e., Pref. p. vii, note 1.

|| Thibaut, *Pātchasiiddhāntika*, Introd. p. xxviii.

¶ See *Actes du X. Congrès International des Orientalistes*, p. 104. For details of the astronomical use of the *yugas*, the reader is referred to the translation of the Sūrya Siddhānta, JAOS vi. p. 15 ff.

parirdha, had elapsed at the beginning of the present kalpa.*

The notions of the Buddhists about the Ages of the World (*yugas*) and about the larger periods (*kalpas*) are similar to those of the orthodox Hindus, but still more fanciful. The names of the four *yugas* are the same, but their arrangement is different. They begin with *kaliyuga* and go up to *kṛtayuga*,† and then, in reversed order, go down to *kaliyuga*.‡ Thus, instead of a *mahāyuga* of four Ages, the Buddhists assume a period of eight Ages, which is called an *antarikalpa*. An *antarikalpa* is 'the interval that elapses while the age of man increases from ten years to an *asankheyā* (*asankheyā* = 10,000,000⁶), and then decreases again to ten years; this period is of immense length.'§ According to some authorities, it has a length of 1,680,000 years.|| Together with the age, the moral state of mankind increases and decreases. Twenty *antarikalpas* form one *asankheyā kalpa* (Pali *asankheyā kappa*), and four *asankheyā kalpas* constitute one *mahākalpa*. The first *asankheyā kalpa* is called *samvarta* (P. *samvatta*), during which a world or sphere (*chakravat*, P. *cakkavat*) is completely destroyed by fire, water, or wind. In the second (*samvartasthāyin*, P. *samvattasthāyin*) the state of void continues. In the third (*vivarta*, P. *vivatta*) the world is being built up again; and in the fourth (*vivartasthāyin*, P. *vivattasthāyin*) the world continues to exist.

It is during this last period that the world becomes first inhabited, by *abhisevara* gods of the Brahmaloka being born on earth. These self-luminous beings lost their lustre when they first began to feed on a delicious juice produced by the earth. They then created the sun, the moon, and the stars. While these beings gradually degenerated, the earth ceased to yield this first kind of food, and produced a kind of cream-like fungus. This was followed by a climbing plant, and this again by an extraordinary kind of rice. When this rice was used as food, sexual intercourse began. The rice deteriorated, and at last ceased to grow of itself. At the same time other vices were introduced, and personal property, till at last the present order of mankind was established.¶ Then comes the period of the twenty *antarikalpas*, described above. A hundred thousand years before the end of the *mahākalpa*, a god appears and warns mankind of the coming event, exhorting them to amend. And after that time the destruction of the earth—nay, of a billion of worlds or *chakravatas*—sets in by fire, water, or wind.** The *mahākalpas* are either empty (*śūnya*) *kalpas*—those in which there is no Buddha—or *Buddha kalpas*. The latter are of five kinds, *stra*-, *manda*-, *vara*-, *sāramanda*-, and *bhadrakalpas*, according as one, two, three, four, or five Buddhas appear. The present *kalpa* is a *bhadrakalpa*; for four Buddhas have already appeared—Krakucchanda (Kakusandha), Kānakamuni (Konāgamana), Kākyāya (Kassapa), and Gotama; and the fifth, Maitreya (Metteyya), has yet to come (see above, pp. 187–190).

The notions of the *Jainas* about the Ages of the World are not quite unlike, yet curiously different from, those described above. The *Jainas* liken time to a wheel with twelve spokes; the descending half of the wheel is called the *avasarpini* period, the ascending half *utsarpini*. Each half is divided into six Ages (*āras* = 'spoke'). The *āras* are, in *avasarpini*, the following:—(1) *susamasuṣamā*, the duration of which is 400,000,000,000 oceans

* Wilson, *Viepu Purāpa*, i. p. 58.

† *Utarpani yuga*; see Hardy, *Manual of Buddhism*, p. 7.

‡ *Arapani*, apparently for *avasarpini*, ib.

§ Childers, *Pali Dictionary*, s.v. 'Kappa.'

|| Burnouf, *Lotus de la bonne Lot*, p. 324 f.

¶ Hardy, l.c. p. 64 ff.

** Hardy, l.c. p. 28 ff.

of years (*adgaropamā*); (2) *susamā*, 300 billions of oceans of years; (3) *susamadusamā*, 200 billions of oceans of years; (4) *dusamasuṣamā*, 100 billions of oceans of years, less 42,000 common years; (5) *dusamā*, 21,000 years; (6) *dusamadusamā*, likewise 21,000 years. The same Ages recur in the *utsarpini* period, but in reversed order. In the first Age men lived three *palyas* or *palyopamā*, a long period not to be expressed in a definite number of years (one billion of *palyas* go to one ocean of years), and men grew to a height of three *gavyutis*, a *gavyuti* being about two miles. Men were born in pairs, and each pair gave birth to a pair of twins, who married. There were ten kinds of miraculous trees (*kalpavrka*), which furnished men with all they wanted. The earth was as sweet as sugar, and the water as delicious as wine. This state of things continued through the first three Ages, but gradually age after age the length of life declined, and was only two *palyas* at the beginning of the second, and one *palya* at the beginning of the third Age, while correspondingly the height of the body diminished to two and one *gavyuti*. Furthermore, the power of the trees and the quality of earth and water deteriorated at the same rate. In the third Age the trees more slowly satisfied the wants of men, who therefore claimed them severally as personal property. Vimalavāhana was appointed to keep order among men, and he became the first patriarch (*kulakara*). The seventh patriarch, Nābhi, was the father of Rābha, who was anointed the first king, and who introduced the principal institutions of mankind. Rābha became the first *tīrthakara*, or prophet of the *Jainas*. His *nirvāna* occurred 3 years 8½ months before the end of the third Age. In the fourth Age the order of things was similar to the present one, except, of course, that everything gradually deteriorated with the lapse of time. The life of man lasted a crore of *pūrvas* (a *pūrva* = 8,400,000⁶ years) at the beginning, and diminished to a hundred years at the end of the Age; and, similarly, the height of men decreased from 2000 cubits to 7 cubits. 23 *tīrthakaras* were born in the fourth Age, the last of whom, Mahāvira, died 3 years 8½ months before the beginning of the fifth Age, which began in B.C. 522. In the fifth and sixth Ages length of life will diminish down to 16 years, and the height of men to 1 cubit. There will be no *tīrthakaras* in the last two Ages of the *avasarpini* period. In the succeeding *utsarpini* period the same Ages will recur, but in reversed order. In this way an infinite number of *avasarpinis* and *utsarpinis* follow each other.*

The idea on which the notion of these periods seems to be based is apparently the year. The *avasarpini* and *utsarpini* correspond to the two *ayanas*, the southern and northern course of the sun; and the six *āras* of each period to the six months of the *ayana*.† On the other hand, the first three *āras*, with their pairs of twins, with the miraculous trees for their subsistence, much resemble the first *kṛtayuga* of the *Purānas*, while the remaining three *āras* may be compared to the *tretā*, *dyāpara*, and *kali yugas*. A peculiar feature of the *Jaina* system, however, is the great disparity in length between the last two Ages and the first four, while the relative length of the four *yugas* is reproduced in the *āras*, if we consider the fourth, fifth, and sixth *āras* as one.

On the whole, there is an unmistakable family likeness between the notions of the orthodox Hindus, the Buddhists, and the *Jainas*, as described above, though they have developed on different lines.

LITERATURE.—Besides the works referred to throughout this article, consult the Literature given at the end of the article *AGES OF THE WORLD (Buddhist)*.

H. JACOBI.

* Hemacandra, *Adīkara-śāstrī*, 2. 113 ff.

† Cf. *SBE* xiv. p. 16, note 1.

AGES OF THE WORLD (Jewish).—1. The Heb. word *yôm* (יֹם), 'day,' is frequently applied in both Biblical and post-Biblical literature in a sense closely allied to that of an Age of the World. *Levit.* *Rab.* 19 and *Sanh.* 19, referring to Ps 90¹, say God's 'day' is a thousand years. Philo in *de Opificio Mundi*, i. 3, etc., treats 'the Days of Creation' as covering an epoch. He denies that the story of Genesis is to be taken literally as meaning an actual creation in six ordinary days. Creation was not in time: the six days described the arrangement or order of creation, much in the same sense as scientists talk of the geological orders. Midrash *Ber. Rab.* xii. deals with the time occupied in creation. 'The day of the Lord' (*Mal* 4¹) 'that day' (מִנְיָם עַתָּה, Zec 14²), 'the great day' (*Mal* 4¹), 'the day of judgment,' 'the day of vengeance' (*Jer* 46¹⁰), 'the day of rebuke' (*Hos* 5²), are all expressions for the Last Judgment, sometimes covering the future world (עולם הבא) which will succeed it. *אַזְמָן*, 'our day,' is used as a synonym for *זָמָן הַזֶּה*, 'this world' (Targum for 'days' in Ps 34¹²). 'The days of the kings' (*Dn* 2⁴) means the everlasting kingdom of the future world. 'The days of the Messiah' (*Sanh.* 99a) is used in the Talmud and Midrash for the Messianic Age; 'the days of the life of the world to come,' for the future world which follows. 'The day which is all Sabbath,' 'the day which is altogether good,' 'the day which is altogether long,' 'the day whereon the righteous sit with crowns upon their head and enjoy the splendour of the Divine presence,' are expressions in the Jewish Liturgy (in the grace after meat for Sabbaths and Festivals, especially Passover) which also connote the future world.

2. Before this world existed there had been successive creations (*Gen. Rab.* 1, *Ab. R.N.* xxxvii.). 'Seven things were created before the world was created, and these are they: the Law, Repentance, the Garden of Eden, Gehenna, the Throne of Glory, the Temple, and the Messiah's name' (*Pes.* 54a). There were 974 generations before Adam, which with the 26 generations between Adam and Moses make up a thousand (*Shab.* 88b, *Hag.* 13b, 14a). The Mishna discourages such cosmogonic speculations. 'Two together should not study the Creation nor even one the Chariot' (*Hag.* cap. ii.). The Gemara *ad loc.* (*ib.* 11¹) forbids inquiry into what was before the world was, basing this on the limitations of Dt 4².

3. In the Bible narrative there are traces of a Golden Age in the account of the Garden of Eden, where Adam dwelt till the Fall. As to the length of his sojourn the Rabbis differ. The Bible narrative presents some striking parallels to the Assyrian story, just as the post-Biblical does to Zarathushtrian speculations. But, as Goldziher points out in his *Mythology among the Hebrews*, even if its cosmogony had been derived from Iranian sources, it is an essential part of their system, whereas the Pentateuch makes no further use of it. It is notable that the later Jewish view is that *Gan Eden* (Paradise) will be the reward for good conduct after death. This is no devolution from a Golden to an Iron Age (for traces of which in Dn 2, see below), and no evolution in an opposite sense, but rather a sort of endless cycle; 'the thing that hath been, it is that which shall be' (*Ec* 1⁸).

4. The Pentateuch is almost exclusively concerned with the history of Israel, and the first age of persecution (afterwards known as a מִסְרָה, *gālūh*, or 'captivity') is that of Egypt. According to Gn 15³, Abraham's seed is to be afflicted 400 years. In Jg 11²⁰ a period of 300 years is given as the interval between the Exodus and Jephthah, during which the children of Israel were left in undisturbed possession of the other side of the Jordan. In

1 K 6¹ the period between the Exodus and the building of the Temple is fixed at 480 years.

5. The Prophets, before the Assyrian captivity, are concerned only with the immediate future. They deal with practical politics, and warn the people to repent in view of disasters that are imminent. The Day of the Lord, which in the post-captivity literature of the Bible becomes the Day of Judgment, occurs already in Amos (5¹⁶⁻²⁰), the earliest of the later prophets, as well as in Isaiah (cf. W. R. Smith, *Proph.* 131f.).

6. In the post-exilic literature of the Bible we first meet with a distinct promise of an ultimate, not immediate, Messianic Age, in which all wrongs will be righted. The return under Zerubbabel had proved a disappointment. The autonomy of the Jews had not been satisfactorily re-established. The Jews did not occupy their proper position in the world. The people were dissatisfied with their leaders, and thus the notion of an ideal Messiah rather than a political one seems to have become evolved. Zechariah (ch. 14), when he proclaims: 'One day which shall be known to the Lord, not day, nor night . . . there shall be no more the Canaanite in the house of the Lord of Hosts,' represents a Messianic Age distant but sure. Malachi is much more practical. He preaches against the sins of his day, but even he does not threaten with immediate disaster. His 'day that I [the Lord] do make' (*Mal* 4¹)—the great and dreadful day of the Lord (4¹)—in the Day of Judgment, and here first is Elijah the prophet promised as a precursor of that day. Daniel is written in a different spirit. Despite its mysticism, it is a political pamphlet. It is almost certainly late, and intended to encourage those who were suffering under the Syrian oppression. Ben Sira is perhaps earlier. He, too, prays for redemption (ch. 36), and, like some of the Psalms and post-exilic prophets, looks forward to the Kingdom of God. The Apocalyptic literature, of which Enoch is certainly, and the Book of Jub. is perhaps, pre-Christian, is overweighted by the gloomy events of the time. The Messianic Age is increasingly needed, and national impatience insists on fixing its date.

7. The destruction of Jerusalem gave a mighty impetus to apocalyptic literature. The era of Messiahs and Prophets produced such men as Theudas in B.C. 44, under Fadus; 'the Egyptian' was another such under Felix; under Hadrian appeared Bar Cochba 'the Son of the Star,' who persuaded even an Akiba to join him in insensate revolt against Rome; and so on through a long succession of pseudo-Messiahs down to Sabbatai Zebi (whose advent in the mystic year 1666 caused such excitement both in and out of Jewry), and even to Mari Shooker Kohail, an impostor who so lately as 1870 excited wild hopes among some Arabian Jews of Aden. The Diaspora seemed to lay stress on individual rather than national hopes of reward and punishment after death. But Messianic hopes are traceable even in Philo, who looks to a future re-assemble of the Diaspora in Palestine, and echoes of this view are to be met with in the 4th *Eclogue* of Vergil. The Kingdom of God and His people (see Ps 145¹¹, Wis 10¹⁰) is of the future (cf. Is 52¹, Mic 4¹, Zec 14²). Contrast the national view of Is 24¹⁹, 'The Lord of Hosts shall reign in Mount Zion, and in Jerusalem,' with the universalistic concept of *Orac. Sib.* iii. 767, 'His everlasting Kingdom shall be over all creatures,' and the Jewish Liturgy for the New Year and Atonement, 'all works shall fear thee . . . joy to thy land . . . shining light to the Son of Jesse thine anointed . . . when thou makest the dominion of Arrogance to pass away from the earth' (Singer's *Prayer Book*, 239). But such universalistic ideas are comparatively rare. God's

Kingdom is also that of His people (Dn 2⁴ 7⁷). And this idea prevails throughout the Jewish apocalyptic writings, e.g. Assump. Mos., Enoch (Eth. and Slav.), 4 Ezra: God's enemies, whole peoples, will be previously destroyed. It is perhaps based on Ezekiel's Vision of Gog and Magog (38 and 39) as the first prophecy of this stage. After this world-war comes the Judgment (Jl 3¹²). Meantime the people of Israel will be hidden away in safety (Is 26²⁰, Zec 14⁵, Apoc. Bar 29⁹, and Mk 13¹⁴⁻²⁰). The precursors of the Messiah are Elijah (Mal 4⁵, Sir 48¹⁰⁻¹², Orac. Sib. ii., *Edujoth*, viii. 7), Moses (Dt 18¹⁵), Enoch (Gn 5²⁴, Eth. Enoch). The Messianic Kingdom is predominantly particularistic. The Diaspora will be reunited, Jerusalem rebuilt, the heathen converted.

8. In the Apocalyptic literature, and first in Daniel, we get the universalist idea of 'this world' and 'the next' as parallel to the tribal idea of the Present Age and the Messianic Age. The *Aeon* of *מִן־הַבָּשָׁר* (*מִן־אָלֹהִים*, 1 Ti 6⁷) is 5000 years in Assump. Mos.; 10,000 in Eth. En 16¹ 18¹ 21⁶, Jub 1⁹; 7000 in *Sanh.* 97a, where R. Katina says the world will last 6000 years and in the seventh will be destroyed; of the 6000, 2000 years are 'Tohu' (chaos), 2000 Torah, and 2000 Messianic. This theory is based on the 6 days of Creation. 'As the sabbatical year is remitted once in 7 years, so is the world remitted 1 chiliasm in 7' (cf. Bacher, *Agada der Tannaiten*, i. 139 ff. [2nd ed. 133 ff.]).

Daniel's theory of year-weeks (ch. 9) is based on the 70 of Jer 25¹² 29¹⁰. (The Babylonian year was divided into 72 weeks of 5 days each). Daniel's 4 metals (ch. 2) and his 4 great beasts (7⁸) seem based on the classical conception of this world's division into the Gold, Silver, Bronze, and Iron Ages. Eth. Enoch also divides the period of the 70 shepherds into 4 ages ('cursus alter' is divided into 4 *hora*, meaning perhaps 4 Roman Emperors).

9. The division into 7 millenniums for the duration of 'this world' is made in Eth. Enoch, Test. Abr., R. Katina (*Sanh.* 97a). The preceding tribulations of the Messiah are to last 7 years, says R. Simeon ben Jochai (*Der. Eretz zut.* 10). In 3¹ periods (Dn 12⁷) 'all these things shall be finished.' 4 Ezra divides the world into 12 portions. All these figures, 4, 7, 1, 70 (72), and 12 have an astronomical basis, and correspond to the seasons, the days of the week, the weeks of the Babylonian year, and the signs of the Zodiac.

10. The mathematical determination of the end of 'this world' and the beginning of the next was eventually discarded by the Rabbis after all such calculations had proved false. 'Rab says, All the terms (*רְצָפָה*) have ceased, and the matter resteth only upon repentance and good works' (*Sanh.* 97b, cf. Am 5¹⁸). Before God renews His world (*וְנַחֲנָה*), the Messianic Age will come. It is interpolated between this world and the next. The time of Messianic tribulations (*וְנַחֲנָה*) is the precursor of the change of *Aeon*. Men will be weaker (4 Ezra 5⁴⁻⁵). They will suffer terrible diseases (Orac. Sib. iii. 538), children will be born with white hair (Jub 23²⁰), women will be barren (Orac. Sib. ii. 184). Fields will not fructify (4 Ezra 6²²), poverty and famine will prevail (Eth. En 99⁶, Apoc. Bar 27), universal war will rage (4 Ezra 9⁸), the wise shall be silent and fools shall speak (Apoc. Bar 70⁹). Then will come the Judgment (*וְנַחֲנָה*), when God will weigh sins and virtues, but even here the Messiah, Prince of Peace, emerges (Apoc. Bar 29 and 73); and after all this travail the time of the Messiah shall be revealed, though He is here no longer the national hero but the renewer of Paradise, the restorer of the Golden Age. Next will follow the Resurrection of the Dead (Is 26¹⁹). God will destroy death (Dn 12⁸ 'Many of them that sleep in the dust of the earth shall awake'). En 51¹⁻⁴,

4 Ezra 7⁹, and Apoc. Bar 50² point to a universal resurrection. Others limit this to the righteous (*Test. of Judah*, xxv., cf. Jos. Ant. xviii. § 14 [ed. Niese]). The Rabbis throughout their literature rebuke the scepticism of the Sadducees who deny this dogma (*Sanh.* xi. 1: 'He hath no portion in the world to come who denies that the Resurrection of the Dead is in the Torah'). The righteous obtain eternal life (*בָּרוּךְ בָּבָרָה לְהָרָה*). After the Resurrection comes the Renewal of the World. Is 65¹⁷ foretells the creation of 'new heavens and new earth'; Jub 1²² speaks of the New Creation; *Mekhilta* 51b on Ex 16³⁵ describes this *שָׁמֶן וְשָׁמֶן*, 'the new world.'

11. The discordance of ideas between the earthly Paradise of the Messianic Kingdom and the transcendental New Jerusalem induced a belief in an interregnum (cf. Eth. En 91). The Ages of the World are 10 weeks; the 8th, that of the sword and rebuilding of Jerusalem, is the Messianic period. The 9th and 10th are those of the Last Judgment, at the end of which comes the New Creation. In the Apocalypse of John (ch. 20) this Messianic interregnum is to last 1000 years, whence the Christian doctrine of the Chiliasm (cf. *Orac. Sib.* iii. 4 Ezra, and *Apoc. of Barnabas*). In 4 Ezra 7²⁰ the Messianic period lasts 400 years, after which Christ returns to heaven, and the general Resurrection follows.

In the Talmud the Messianic period is to last a 'fixed time' (*Zebachim* 118b, *Arakhin* 13b, *Pes.* 68a). Periods mentioned are 40, 70, 365, 400, 1000, and 2000 years. Only Ben Zoma in *Ber.* 1. 5 contrasts this world with the Days of the Messiah. But in the 2nd cent. a clear distinction is drawn between the Days of the Messiah and the Future World (cf. *Shab.* 151b, *Pes.* 68b, *Sanh.* 91b, *Ber.* 34b). The Samaritan Messiah, Ta'eb, dies 'after a long reign.' 'All the prophets,' say R. Chiyya bar Abba and R. Johanan, 'prophesied only as to the days of the Messiah, but, as for the Future World, no eye but thine, O Lord, hath seen it' (*Ber.* 34b).

Malmonides in his *Festum Epistles* gives the following order: Resurrection, Future World, Death, and a second Resurrection. In his *Morah* 11, 29, and 30 he endeavours to prove that the world is eternal, and in his *Mishnah Tora* on 'Repentance' (8) he declares that the future world is already existent. Nachmanides (in his *Torah Adam*, 'Reward and Punishment,' *תְּבוּנָה*) and the Raabadi dispute this, and declare that Gn 8²² 'while the earth remaineth' suggests its destruction. The world is to return to *tohu bohu* (chaos), and the Almighty will renew it. So too Azaria de Rossi (*Meor Enayim*, xlii. 54). When Ecclesiastes says (14) 'the world abideth for ever,' he only means the world Jubilee. Baba ben Asher in his *Comm.* on Lv 25², 'then shall the land keep a Sabbath unto the Lord,' takes this to support the view of the Qabbala as referring to the destruction of the world (*כָּלֵל כָּלָל*). The rest eternal is the future world after the Resurrection. In Lv 25⁸, 'seven times seven years,' the second seven 'hints' (*דִּין*) at the Great Jubilee, which is the end of the world. The Qabbala, though the idea predominates therein of the world-wheel (*gilgal*), implying the endless recurrence of all things, is directed less to time than to space. The notion of space is older than that of time. Even beasts distinguish things by their space. The discrimination of things by time does not follow till relatively late. But even the mysticism of the Qabbala has a bearing on the Jewish view of the future life. It is, without doubt, Christologically tinged, and, though highly venerated by the Eastern Jews, is practically neglected nowadays by those of the West.

In the *Zohar* on Gn 20¹ it is said that Adam should have lived 1000 years, but gave up 70 for David (alluding to Ps 214).

12. Bible chronology has always presented difficulties. The discrepancies between the chronology of the Massoretic and Samaritan texts and the Septuagint are dealt with by Dr. Jacob of Göttingen. He explains one chief variation as due to a desire to date Noah exactly 1000 years after Adam. *Pirke Abot* (v. 2, ed. Taylor) draws attention to the fact that there were ten generations from Adam to Noah, and ten from Noah to Abraham. The chronology of Genesis would seem to have been based on years according to the solar system, but the Jews reverted to the lunar system after the Exodus, as seen from Ex 12¹².

13. The conservative Jewish view is still expressed in the following passages in its Liturgy. The 12th Creed expresses belief 'in the coming of the Messiah, and, though he tarry, I will wait

daily for his coming'; the 13th, 'that there will be a resurrection of the dead at the time when it shall please the Creator' (Singer's *Prayer Book*, p. 90); in the *Qaddish* (*ib.* p. 37), 'May he establish his Kingdom in your days . . . speedily!' (cf. *Orac. Sib.* iii. 767). In the Sabbath Morning's Service (*ib.* p. 129) the following antitheses bring out Jewish belief in the four cosmic stages or Ages of the World: 'There is none to be compared unto thee, O Lord our God, in this world, neither is there any beside thee, O our King, for the life of the world to come; there is none but thee, O our Redeemer, for the days of the Messiah; neither is there any like unto thee, O our Saviour, for the resurrection of the dead.'

LITERATURE.—Bacher, *Agada der Tannaiten*, vol. I. 1884; Bousset, *Rel. d. Judentums*, 1906, pt. iv, pp. 233–346 (cf. the list of authorities cited by him); Schirer, *GJV* ii. 496–556; R. H. Charles, *A Crit. Hist. of the Doc. of a Future Life in Israel*, London, 1899; Loewy, *Messiazeit und Zukünftige Welt* in *MGWJ*, 1897, 392–409; *Sanh* c. 11; Maimonides, *יְהוָה יְהוּנָה, Yemen Epistles*; Nachmanides, *Torath Adam*, 'Sha'ar Ha Gemul'; Maimonides, *Guide to the Perplexed*, II. 29, 30, also his *Mishna Torah*, *Hilchot Teshubot*, viii.; Azaria di Rossi, *Moor Enayim*, xlv. 54; Lipschitz, *Mishnah*, *מִשְׁנָה*; An Excuse on the Future Life (based on *Nesikot*).

E. N. ADLER.

AGES OF THE WORLD (Muhammadan).—See COSMOGONY (Muhammadan).

AGES OF THE WORLD (Teutonic).—See COSMOGONY (Teutonic).

AGES OF THE WORLD (Zoroastrian).—I. By far the most detailed account of Iranian cosmology is afforded by the Pahlavi *Bundahishn*, a work which, though dating in its present form from the post-Muhammadan period, undoubtedly contains material of far greater antiquity. According to it, Atharmazd (Ormazd) 'produced spiritually the creatures which were necessary for those means [his complete victory over evil], and they remained three thousand years in a spiritual state, so that they were unthinking [or invulnerable] and unmoving, with intangible bodies' (i. 8). . . . 'And Atharmazd spoke to the evil spirit thus: "Appoint a period, so that the intermingling of the conflict may be for nine thousand years." For he knew that by appointing this period the evil spirit would be undone. Thus the evil spirit, unobservant and through ignorance, was content with that agreement; just like two men quarrelling together, who propose a time thus: "Let us appoint such-and-such a day for a fight." Atharmazd also knew this, through omniscience, that within these nine thousand years, for three thousand years everything proceeds by the will of Atharmazd, three thousand years there is an intermingling of the wills of Atharmazd and Aharman, and the last three thousand years the evil spirit is disabled, and the adversary is kept away from the creatures' (i. 18–20, West's tr.). Then Ahura Mazda (Pahlavi *Atharmazd*) recited the *Ahunavar*, and exhibited to the evil spirit his own triumph in the end; the evil spirit, perceiving his own impotence and the annihilation of the demons, became confounded and remained three thousand years in confusion, that is, the second trimillennium of time. During the confusion of the evil spirit, Ahura Mazda created Good Thought (Pahlavi *Vohuman*), as well as the five other archangels. Ahriman (wh. see) produced in opposition to them six corresponding evil powers. Of the creatures of the world Ahura Mazda produced first, the sky (and the light of the world); second, water; third, earth; fourth, plants; fifth, animals; and sixth, mankind (*ib.* i. 21–28). The spirits of men, their *fravashis* and their consciousness, had already been created in the beginning.

Now Ormazd deliberated with them, asking them if they would assume a bodily form in order to contend with the fiend Ahriman, and in the end become wholly immortal and perfect for ever, whereupon they consented (i. 10–11). According to the third chapter, the confounding of the evil spirit and his demons was due to 'the righteous man,' a phrase which doubtless designates Gayamaretan (Pahlavi *Gayomart*), the primeval man, who existed undisturbed, during the same second trimillennium, with the primeval ox.

The evil spirit now rushed into creation, and the seventh millennium, or the third trimillennium, began. The elements, the primeval ox, and the primeval man were successively attacked by the Evil One. But the appointed time for Gayamaretan had not yet arrived. He lived and ruled for thirty years more, although the destroyer had come (iii. 22 f.). Attacked by Ahriman, the ox fell to the right; from his body and his limbs the plants were produced, and the animals from his seed (iv. 1, x. 1–3, xiv. 1–3).* Gayamaretan fell on the left side in passing away, and from one portion of his seed received by the earth the first human couple, Mashya and Mashyot, grew up for forty years as a plant, and were then changed into the shape of a man and a woman (iv. 1, xv. 1–5). The history of mankind, which then began, occupies the second half of the 12,000 years.

The 34th chapter of the original *Bundahishn* sums up the first two trimillennia of the creation as follows: 'Time was for twelve thousand years; and it says in revelation, that three thousand years was the duration of the spiritual state, where the creatures were unthinking, unmoving, and intangible; and three thousand years was the duration of Gayomart, with the ox, in the world.' Those three millenniums are immediately connected with three of the constellations of the zodiac: Cancer, Leo, and Virgo.

The first millennium of the human race is distributed as follows in the same chapter:—

Gayomart, 30 years.
Mashya and *Mashyot* growing up during 40 years (*Bund.* 15. 2).
" " living without desire for intercourse, 50 years.

" " living as husband and wife, 93 years, until *Hushyang* (Av. *Hushyangha*), great-grandson of Mashya, came, 40 years (and six months, according to Windischmann).

Takhmorup (Av. *Takhma-wrupa*; Shah-nāmah *Təmərəs*), great grandson of Hushyang, 30 years.

Yima (Av. *Yima*; Shah-nāmah *Jamshīd*), brother of Takhmorup, 616 years and six months, until the divine power or glory of the Iranian rulers left him, in the shape of a bird, because he took pleasure in words of falsehood and error (*Yasht*, xix. 34), and made himself something more than a man.

Then he lived in concealment for 100 years.

Total, 999 years and six months (or 1000 years). The next millennium, the second of human history, and the eighth of the creation, was under the sway of Dahak, whose lineage on his mother's side is traced, by *Bund.* xxxi. 6, nine degrees from the evil spirit himself. Dahak is the Azhi Dahaka, the dragon with three heads, of the Aveste, who tried to seize the kingly power-substance, the *khuarenah*, as it left Yima, who had become too proud owing to his happy paradise-reign; but Atar, the fire, saved it (*Yasht*, xix. 47 ff.).

According to another tradition in the same *Yasht* (xix. 35), the *khuarenah*, in leaving Yima, went in three parts: one to Mithra; the second to Thraētōna, who killed the dragon Ashi Dahaka; and the third to Kerešēspa, the great hero, who is to be the successful adversary of the dragon at the end of the time. Those three guardians of the 'kingship glory' are regarded as succeeding each other, so that Mithra preserves it during the reign of the fiend, until Thraētōna comes—as, in the other version, just mentioned, Atar is said to save the kingly glory, which takes refuge in the waters of the sea Vouru-Kasha.

After the millennium of Dahak, who is assigned

* The twenty-seventh chapter of the *Bundahishn* presupposes the existence of plants before the attack of the fiend: 'It says in revelation, that, before the coming of the destroyer, vegetation had no thorn and bark about it.'

by *Bānd*. xxxiv. 5 to Scorpio, the sovereignty devolved on Frētūn, the Thraētaona of the Avesta, the Fridūn of the Shāh-nāmāh, who killed the terrible usurper and introduced the third millennium of mankind and of the third trimillennium of creation. This millennium is assigned by the *Bundahishn* to Sagittarius, and contains the names of the heroic legends of ancient Iran. The *Bundahishn* makes the following calculation (xxxiv. 6-7):—

Freyūn, contemporary of the 12 years of Aīrīc, 500 years.
Māndashīhar (Av. *Manushcithra*), contemporary of the Turanian adversary Frāsiyāb, the Franhrayav of the Avesta, who made Māndashīhar and the Iranians captive in the mountain-range Padashkhvār, south of the Caspian, 120 years.
 Zob, Aūsobō (Av. *Uzba*; Shāh-nāmāh *Zev*), grandson of Māndashīhar, expelled Frāsiyāb from Iran, and reigned 5 years; adopted.
 Kai-Kabāt (Av. *Kavi Kaedta*), founder of the most renowned royal race of Iran, the Kavis, who retained the *khwāraenā*, the spiritual substance of the kingship of Iran, during several generations, 15 years.
 Kai-Kāhā (Av. *Kavi Usadhan*), grandson of Kai-Kabāt, 150 years.
 His grandson Kai-Khūsrāv (Av. *Kavi Husravāk*), who was received into heaven without death, 60 years.
 Kai-Lōrāsp (Av. *Kavi Auryav-apsa*), 120 years; and his son Kai-Viātāsp (Av. *Kavi Viātāpa*), the protector of Zarathushtra, until the coming of the religion, 30 years.

Total, 1000 years.

So far the last chapter of the *Bundahishn*. It accordingly gives only a short chronology of the millennium of the Zarathushtrian faith,—ruled by Capricorn,—in which period the present generation is thought to live. After the coming of religion it reckons (xxiv. 7-9):—

For the Achæmenians	258 years.
" Alexander	14 "
" the Ashkanians (Arsacides)	284 "
" the Sasanians	460 "
Total	1016

Then the sovereignty is said to have fallen to the Arabs (cf. the somewhat older list of the Iranian kings in the Mandean *Gīzīd*; Louis H. Gray, 'The Kings of Early Iran according to the *Sidra Rabbā*', in *ZA*, xix, 272 ff.).

In this chronological table the successors of Alexander and the Parthian kingdom until Ardashir, the founder of the Sasanian dynasty, occupy only 284 years, instead of at least 547. On the other hand, the Sasanians have too many, 460 years instead of 426 or 427. This double mistake is perhaps unintentional. Although the total of the historical chronology is thus shortened by the writer of *Bundahishn*, xxxiv., the millennium should be finished and the expected Saviour should have come, as we have seen, sixteen years before the Arabs. This millennium, which must contain the whole history since the revelation to Zarathushtra, has been a puzzle to the Zarathushtrians. The *Bahman Yash* (Pahlavi), which has, in its present form, a complicated literary history behind it, shows the difficulty caused by the old traditional statement of the sacred writings that a son of the prophet should be born in a supernatural way and appear a thousand years after the beginning of the new dispensation. The popular belief awaited rather a valiant warrior, Bahram Varjāvānd, the Iranian Messiah. Indeed, we read in the Pahlavi *Bahman Yash*, iii. 44 ('Pahlavi Texta', tr. by E. W. West, *SBE* v. p. 231): 'Regarding Hūshētar it is declared that he will be born in 1600.' This must mean 1600 years after Zarathushtra. That is 600 years too late—but it brings us only to the beginning of the 18th cent. A.D., according to the traditional Zarathushtrian chronology. (See the introduction of E. W. West to his tr. of *Bahman Yash*; and Bousset, 'Beiträge zur Gesch. der Eschatologie' in *Etzehr. f. Kirchengesch.*, xx, 122 ff.; N. Söderblom, *La Vie future*, 271 ff.; and art. *ESCHATOLOGY* [Parsi].)

It is evident, as E. W. West has pointed out in his most important introduction to vol. v. of his tr. of Pahlavi Texts (*SBE* xlvii.), that this system of chronology must have been made before the year that should finish the millennium of the actual history of mankind after Zarathushtra. The first revelation to the prophet being dated by the Pahlavi tradition 800 years before Alexander, or about 830 B.C., that means about 370 A.D.

Amongst other statements and calculations to be found in Pahlavi writings about the first thousand years of the last or fourth trimillennium, besides the short notice at the end of the *Bundahishn*, two have an interest for our present purpose.

(1) The period of mankind being fixed at 6000 years, Zarathushtra, who was born thirty years before the end of the former 3000 years, and whose first intercourse with the celestial beings begins the second trimillennium, makes his appearance

in the middle of human history. According to the *Sad Dar*, lxxxi. 4-5, it is declared in revelation that the Creator spoke to Zarathushtra thus (*SBE* xxiv. 345):

'I have created thee at the present time, in the middle period; for it is three thousand years from the days of Gayōmard till now, and from now till the resurrection are the three thousand years that remain. . . . For whatever is in the middle is more precious and better and more valuable, . . . as the heart is in the middle of the whole body, . . . and as the land of Iran is more valuable than other lands, for the reason that it is in the middle.'

(2) The *Dinkart*, ix. 8, a compilation of the 9th cent., renders the contents of the seventh *fargār* of the now lost *Sūkkar Nask* of the Sasanian Avesta thus (*SBE* xxxvii. 181):

'The seventh *fargār* is about the exhibition to Zarathushtra of the nature of the four periods in the millennium of Zarathushtra. First, the golden, that in which Aūharmārd displayed the religion to Zarathushtra. Second, the silver, that in which Viātāsp received the religion from Zarathushtra. Third, the steel, the period within which the organizer of righteousness, Atārpāt, son of Māraspand, was born [or] Adarbad, the great champion of orthodoxy in the 4th cent., who offered to undergo the ordeal of pouring molten brass on his chest in order to prove the truth of the Mazdayasian faith. Fourth, the period mingled with iron is this, in which there is much propagation of the authority of the apostate and other villains, as regards the destruction of the reign of religion, the decay of every kind of goodness and virtue, and the disappearance of honour and wisdom from the countries of Iran.'

It is not possible to say how much of this account belonged to the text of the *Sūkkar Nask* and what is taken from its 'Zend' (its translation and Pahlavi paraphrase, used by the compiler). The events described need not come down later than the time after the death of the great Shāhpūr II. in 379. His grandson Yazdgard I. (399-420) was called by the priests the 'sinner' because of his tolerance in quarrels about religion. At all events, it is scarcely likely that the whole scheme of the four [Metal] Ages, known in India, Greece, Rome, etc., should have been wholly introduced by the Pahlavi paraphrase. In the Pahlavi *Bahman Yash*, i. 8, it is expressly said that the appearance of the accursed Māzdik [the heretic who flourished during the reign of Kōbād (488-531), and who was put to death by his son Khūsrāv Nōshirsān] during 'this time' (the Iron Age), is mentioned in the lost Zend commentary on three *Yash*ts of the Avesta, although the two of these three *Yash*ts still extant (the Avesta *Bahman Yash* being lost) do not contain anything about the matter.

In the same context of the Pahlavi *Bahman Yash* the historical standpoint is a later one than in the *Dinkart's* rendering of *Sūkkar Nask*, and three of the four Ages are applied to other epochs. That of Gold means the conversion of Ahura Māzda and his prophet, and King Viātāsp's acceptance of the religion. That of Silver is the reign of the Kayanian *Artāshāhr*, generally identified with Artaxerxes Longimanus (465-424)—perhaps including the reigns of Xerxes II., Darius II., and Artaxerxes Mnemon (404-358). That of Steel is the reign of the glorified Khūsrāv, son of Kōbād (531-579), the greatest of the Sasanians during whose reign the Pahlavi literature flourished (F. Justi in *Grundriss der Iran. Philologie*, II. 589). In ii. 21-22 there is allusion to the great merit of the Steel Age king: 'when he keeps away from this religion the accursed Māzdik. . . . And that which was mixed with iron is the reign of the demons with dishevelled hair of the race of Wrath, when it is the end of the ten-hundredth winter of thy millennium, O Zarathushtra, the Spitāman!' The speaker is Ormāz.

In another passage of our Pahlavi commentary or paraphrase of the *Bahman Yash* (ii. 15-22) the Metal Ages are increased to seven. Zarathushtra had seen in a dream a tree with seven branches; one golden, one of silver, one bronze, one of copper, one of tin, one of steel, and one mixed up with iron. The Lord explains the dream thus: The seven branches are the seven periods to come. The Golden one means the reign of King Viātāsp; that of Silver is the reign of Artāshāhr the Kayan (= Artaxerxes Longimanus); the Bronze Age represents the first two Sasanian monarchs, Artāshāhr (226-241) and his son Shāhpūr I. (241-277), and the restorer of true religion, Atārpāt Māraspand ('with the prepared brass'), under Shāhpūr II. (309-379). The Copper Age is evidently out of its order, as it puts us back from the Sasanian dynasty to the Parthians, to 'the reign of the Ashkanian king' [we do not know which] who removes from the world the heterodoxy which existed; while the wicked *Akandgar-i Kūlīsydik* [probably = 'Alexander the Christian'] an anachronism that need not surprise us on the part of a Pahlavi writer, who identified the two great enemies of the Mazdayasian faith coming from the West (Alexander the Great and

the Christian Roman empire) is utterly destroyed by this religion, and passes unseen and unknown from the world. The Tin Age brings us to the powerful Sasanian monarch, Bahram v. (420-488), 'when he makes the spirit of pleasure and joy manifest, and Aharman with the wizards [i.e. the heretics] rushes back to darkness and gloom.' The Steel Age represents the persecutor of Mazdik, King Khurro, and the one mixed with Iron is characterized as in the first chapter.

As we have seen, the four original Ages are the same, but between the Silver one (= Artaxerxes I. and II.) and the Steel one (= Khusrō Anoshirvan) three supplementary periods are intercalated. The Copper Age is out of place, and should probably be put before the Bronze Age. The number four is thus changed into seven.

At the end of Zarathushtra's millennium Ukhshatereta (Pahlavi *Hushētar*), 'the one who makes piety grow,' shall be born, in a marvellous way, from the prophet's seed. When thirty years old, he enters on his ministry to restore the religion (*Bundahishn*, xxxii. 8; *Bahman Yasht*, iii. 44; *Dinkart*, vii. 8, 51-60). The second millennium of the post-Zarathushtrian trimillennium begins. In the 5th cent. of that millennium (*Dinkart*, vii. 9, 3 [SBE xlvi. 108]) the wizard Mahrkūsha, mentioned in an extant fragment (*Westergaard*, viii. 2) of the Avesta as Mahrkūsha, will appear for seven years, and produce a terrible winter, that will, 'within three winters and in the fourth,' destroy the greater part of mankind and of animals.

Those winters are mentioned in the second *fargart* of the *Vendidad* without the name of Mahrkūsha, the demon or the wizard of frost and snow. Yima, the paradise-king, is told by Ormazd to prepare an enclosure, a *vāra*, and to live in it himself with a chosen host of men, animals, plants, and fires, in order to be preserved during the winters that will invade the earth.

When in Hushētar's millennium the enclosure made by Yima is opened, mankind and animals will issue from it and arrange the world again, and there will be a time of fulness and prosperity (*Dinkart*, vii. 9, 3 f.; *Maitrīg-t Khrat*, xxvii. 27-31). New beings thus come back miraculously for the restoration of the world (*Dāstān-i Dinkart*, xxxvii. 95 [SBE xviii. 109-110]).

A thousand years after Hushētar, a second son of Zarathushtra will be born, Ukhshyatnemah, 'he who makes the prayer grow' (Pahlavi *Hushētar-māh*). When thirty years old, he will confer with the archangels. That is the beginning of the last millennium of the world (*Bundahishn*, xxxii. 8; *Dinkart*, vii. 9, 18-23). After its end the third miraculous son of the prophet shall be born in the same way by a third virgin, pregnant from the water of the lake Kansava, which holds the seed of Zarathushtra (*Bundahishn*, xxxii. 8; *Dinkart*, vii. 10, 15-18).

The usual translation of his name *Astar-ereta*, 'he who raises the [dead] bodies,' seems very unlikely. The second part of the name, *ereta*, which means in the name of the first son of the prophet 'righteousness,' being the Iranian equivalent of the Skr. *rta* (which appears otherwise in the Avesta as *asra*), would then be a verbal form in the third name. More probable is Bartholomeus's rendering (*Altiran. Wörterbuch*, col. 218), 'he who is the personified righteousness' or 'piety.' But the analogy with the former two names: *Ukhshyat-ereta* and *Ukhshyat-nemah*, makes one think that the first half also of this third name is a verbal form, an act. particip. of *star*, 'to praise,' with a preceding *a*. If, indeed, the initial *a* were long, the name might be translated, 'he who praises righteousness.'

More frequently the third expected restorer of religion is called *Sasohyant* 'the saviour,' 'the helper,' originally and generally in the Avesta an appellative applied to the zealous Mazdayasnians and promoters of religion.

Now the last conflict breaks out; resurrection and purification open the way to eternal blissful existence. The time preceding the coming of the three restorers of faith will be marked by misery and impiety (*Spēnd Nask*, according to *Dinkart*, viii. 14, 11 ff.). We recall the four Ages that mark a successive deterioration in Zarathushtra's millennium. The Pahlavi apocalypses paint the time before Hushētar's coming in dreadful colours borrowed from history. At the end of the last

thousand years Azhi Dahaka will break his fetters. But, on the other hand, the end of those three Ages is described as an advance towards the glorious consummation (*Dinkart*, ix. 41, 4-8). We have seen how the opening of the gate of Yima's enclosure will produce a new prosperity before Hushētar-māh's appearance. After the 5th cent. of Hushētar's millennium two-thirds of the population of Iran are righteous and one-third wicked (*Dinkart*, vii. 9, 13). In the last millennium 'no one passes away, other than those whom they smite with a scaffold weapon, and those who pass away from old age. When fifty-three years of that millennium of his still remain, the sweetness and oiliness of milk and vegetables are so perfect, that, on account of the freedom of mankind from desire for meat, they shall leave off the eating of meat, and their food becomes milk and vegetables. When three years remain, they shall leave off even the drinking of milk, and their food and drink become water and vegetables' (*Dinkart*, vii. 10, 7 ff.). The milk of one cow shall be sufficient for a thousand men. As hunger and thirst diminish, men shall be satisfied with one meal every third day. Old age shall not be weak any more and life shall become longer. Humility and peace shall be multiplied in the world.

The Greeks were acquainted with the optimistic Mazdayasnian doctrine of the spiritualizing of mankind towards the end. Men, at the end of the world, will need no food, and they will cast no shadow (Theopompus-Plutarch). The eighteenth *fargart* of the *Vərshtmāneš Nask* of the Sasanian Avesta told, according to *Dinkart*, ix. 41, 4, 'about the triumph of the sacred beings over the demons at the end' of the three last periods of the world.

These 12,000 years form the long period of creation, divided into four great Ages. It is bounded by eternity on both sides, by 'time without end.' The 'Great,' or 'Iranian,' *Bundahishn*, which appears to be a later development of the more commonly known *Bundahishn*, says about Time (Darmesteter, *Le Zend Avesta*, ii. 310-311): 'It was without limits up to the creation, and it was created limited to the end, that is, to the reducing of the evil spirit to impotence. After this, Time resumes its infiniteness for ever and ever.' This later theological speculation about the personified Time (*Zrvan*) is found in the Avesta itself, which distinguishes between 'Time without limits' (*Zrvan akarana*), and the 'Time long, self-determined' (*Zrvan daregho-khavadhāta*) (Nyāish, i. 8). In *Vendidad*, xix. 9, Zarathushtra answers the Evil One: 'The benevolent spirit created in the time without limits.' 'Time without limits' was made later on, in order to weaken the dualism to an eternal Divine Being, from whom the two opposite spirits emanate.

The distribution of Time into the endless Time before and after the 'long, self-determined Time' has its exact local equivalent in the strictly organized Mazdayasnian theology. The region of light where Ormazd dwells is called 'endless light.' The region where the Evil Spirit resides is called the 'endless dark.' Between them was empty space, that is, what they call 'air,' in which is now their meeting' (*Bund*, i. 2-4) [cf. Plutarch's words, *de Iz. et Os.* 46, about Mithra as *μεταξύ* between the two 'gods']. The air or atmosphere, *Vayu* (Pahlavi *Vāi*) is defined as well as *Zrvan* (Time), and is designated exactly as Time: *daregho-khavadhāta* (Nyāish, i. 1), 'long, self-determined.' The Great *Bundahishn* (Darmesteter, loc. cit.) distinguishes between the good *Vāi* and the bad *Vāi*-space as well as time being divided according to the dualistic principle. Already the Avesta knew such a distinction, *Yasht*, xv. invoking 'that part of thee, O Vayu, which belongs to the Good Spirit.'

2. Date of the Zoroastrian system of Ages of the World.—(a) As we have already seen, most of the names and legends and ideas that belong to the Pahlavi accounts of the Ages of the World are to be found in the Avesta. As to the system itself divided into four periods, the principal contents of the lost *Dāmdāt Nask*, the book 'about the production of the beneficial creatures,' of the Sasanian Avesta, from which the *Bundahishn*, 'the original

creation,' is derived, are very shortly reproduced in the following terms in the *Dinkart*, viii. 5 (*SBE* xxxvii. 13–14).

'Amid the *Dāmdāt* are particulars about the maintenance of action and the production of the beneficial creatures. First, as to the spiritual existence, and how much and how is the maintenance in the spiritual existence; and the production of the worldly existence therefrom, qualified and constructed for descending into the combat with the destroyer, and accomplishing the associated necessity for the end and circumvention of destructiveness' (West's tr.).

An extant Avesta fragment, quoted in the Pahlavi *Vendidad*, ii. 20, runs: 'How long time lasted the holy spiritual creation' (*cavāntem zrūdnam mānyava stish ashaoni dāta as*). It shows that the complete Avesta knew the system of four times three thousand years.

Except for the events at the end of Zarathushtra's millennium, the Sasanian Avesta must have known all the principal features of the world-chronology now described, with its environment of 'the endless time.'

(b) Plutarch brings us further back, to about 300 B.C., but speaks only of two or three of the four periods (*de Is. et Os.* 47), expressly quoting Theopompus, Philip of Macedon's historian:

Θεόπομπος δὲ φύσιν καὶ τὸν μάγον ἀντί μέρος τριηχίαν ἔγινε τὸν μὲν πρώτον τὸν διαρκεῖσθαι τὸν θεόν, ἐλαύνει τὸν διαρκεῖσθαι μάγοντας, καὶ τολεμεῖν καὶ ἀνάλευνειν τὸν ἔπειρον τὸν ἔργοντας ἀπολιόντας τὸν Αἴδην, καὶ τὸν μὲν ἀνθρώπους σύνειπτον μάγοντας, μήτρας τροφῆς δεσμόντων μήτρας σκύλων ποιῶντας. τὸν δὲ τετράτον μηχανοποίουν θεόν προειπεῖν καὶ ἀναπαίεσθαι χρόνον, καλέσαντες μὲν οὐ τολεῦν τῷ θεῷ, μετέπειτα διαφέροντες κομιζόντες μήτραν.

Bernardakis, in his edition of the *Moralia*, reads after *χρόνον*: *ἄλλος μὲν οὐ τολεῦν τῷ θεῷ* etc.

The first part of this quotation* agrees with the Mazdayasian record of the last nine thousand years (*Bund.* i. 20).

Lagrange ('La Religion des Perses' in *RB*, 1904, p. 85) understands *ἀντί μέρος* as indicating two periods: one with Ahura Māzda as ruler, another with Angra Mainyu as ruler; then follows their fight in a third and last period, ended by the defeat of evil. It is possible to translate *ἀντί μέρος* in that way. But, as the phrase runs, it is more natural to apply the two 'turns' to the two different trimillenniums mentioned. *ἀντί μέρος* belongs to both the following statements. The *μάγοντας τολεμεῖν* comes, as the second 'turn' of the two gods relation, after *τὸν μὲν πρώτον τὸν διαρκεῖσθαι*. The tr. of Lagrange has another drawback. It would be quite an isolated statement in opposition to all other records about Mazdayasian chronology.

Some slight misunderstanding may easily have been perpetrated either by Theopompus or by Plutarch in quoting him. But it seems impossible not to recognize (1) the impotence of Ahriman, (2) the conflict, and (3) the victory of Ormazd—making up the well-known Mazdayasian scheme.

The second part of the quotation from Theopompus offers some difficulty. The last words after *χρόνον* have been more or less ingeniously changed by various conjectures. The phrase should mean: 'The god who has brought about these things [the defeat of Hades (identified with *Αρεμάτεος*; also by Diog. Laert. *Proem.* 6) and the blessed state of mankind] keeps still and reposes himself during a period not very great for the god, as [it would be] moderate for a sleeping man.' But the end of the phrase is not tolerable Greek, and must be corrupted in some way. The meaning compels us to think of a rest of Ahura Māzda after the consummation of the destiny of the world. Such an idea is not necessarily inconsistent with the opposition of later Mazdayasian theology (*Sākand-gāmānd vījdr*, xiii. 102–106 [*SBE* xxiv. 217]) to the Jewish doctrine of a rest of God after the *Creation*. But we know nothing of a Divine repose after the *frahshatereti*, the fulfilment at the end. Theopompus is supposed to have thought of another being, Keresapa, who is to awake from his long sleep in order to kill the unfettered Ashti Dahaka; or of Sachyant, 'sleeping' as the prophet's holy seed in the lake Kansava waiting for his virgin mother; or of Yima, expecting in his *vāra* the end of the desolation caused by the great winter—but not reposing! The context excludes, as far as the present writer can see, the introduction of a third god, after the two enemies spoken of. But it might be that the Greek author has applied to Ahura Māzda some misunderstood statement regarding another figure in the final drama.

(c) The elder Pliny writes (*HN* xxx. 2. 1): 'Eudoxus, qui inter sapientiae sectas clarissimam

* 1. 'One of those gods reigned and the other was under his dominion during three thousand years. 2. During another three thousand years they battle and fight and destroy each other's works. 3. At the end Hades (Angra Mainyu, who was indeed originally probably a god of the infernal regions and of the dead) succumbs, and men shall be happy, needing no food and throwing no shadow.'

utilissimamque eam intelligi voluit, Zoroastrem hunc sex millibus annorum ante Platonis mortem fuisse prodidit. Sic et Aristoteles.' Thus Greek authors of the 4th cent. B.C. placed Zarathushtra 6000 years before B.C. 347. Hermodorus, in the same century, and Hermippus, a century later, put him 5000 years before the Trojan war. Xanthus of Lydia, perhaps a century earlier, seems to have stated that the prophet lived 6000 years before Xerxes. These fanciful dates are the more astonishing the older they are,—that is, the nearer they approach to Zarathushtra's lifetime, which the Mazdayasian tradition places in the 7th cent. B.C., and which can scarcely have been many centuries earlier at least.*

A. V. Williams Jackson ingeniously suggests that the placing of Zarathushtra 6000–7000 years before Christ is due to the Greeks having misunderstood the statements of the Persians, according to which the spiritual prototype of Zarathustra was created several thousands of years before the prophet himself. ('On the Date of Zoroaster,' in *Zoroaster, the Prophet of Ancient Iran*, p. 152 ff.). This view has been supported by West, 'Pahlavi Texts,' v. [*SBE* xlvi. p. xi ff.]

Dinkart, vii. 2, 15 f., in rendering the contents of *Spēnd Nask*, tells: 'Again, too, revelation says that, when the separation of the third millennium occurred, at the end of the 3000 years of spiritual existence without a destroyer (after the creatures were in spiritual existence, and before the arrival of the fiend), then the archangels framed Zarathushtra together, and they seated the guardian spirit [the *freəwāši*, already in existence for 3000 years] within, having a mouth, having a tongue, and the proclaimers of the celestial mansions' (cf. *Dinkart*, viii. 14, 1). Thus the spiritual body of Zarathushtra is framed together two trimillenniums before his birth, at the end of the ninth millennium, i.e. B.C. 6630, according to Mazdayasian tradition. If this striking explanation of the fanciful Greek dates for Zarathushtra be right, even this special feature of the Mazdayasian chronology—the pre-formation of Zarathushtra's body 6000 years before his birth—must have been heard of by Greek writers as early as the 5th cent. B.C., which does not seem very probable. At all events, nothing is to be found in these Greek records about 'the holy spiritual creation,' the first of the four trimillennia.

3. Composite character of the Mazdayasian system of Ages of the World.—This is evident. The means are lacking for the reconstruction of its formation. But certain points may be noted.

(a) The whole Yima legend must drop out. Originally it was an independent scheme of Ages of the World, like the old Norse Fimbulvetr, 'great winter,' which ends this Age and brings about a new mankind, whose ancestors, Lif and Lifthraser, are hidden during the desolating winter in Mimir's grove. Mahrkūha's winter and the new humanity arising from Yima's *vāra* have evidently no *raison d'être* whatever in the complete historical system of the Avestan theology. It has been rather awkwardly put aside in Ukhahyat-ereta's millennium, because it must not be omitted. The Yima legend in *Vendidad*, ii., does not know the 12,000 years' system, and excludes it, at least in its complete form, although the old mythic Yima has been duly transformed into a forerunner of Zarathushtra.

The blessed paradise-reign of Yima was a very popular legend in old Iran. Several Avesta texts mention it (*Yasna*, ix. 4 f.; *Yasht*, ix. 9 f., xiii. 180, xv. 18 f., xvii. 29 ff., xix. 32 ff.), besides *Vendidad*, ii. Under his rule death and sickness and all adversities were unknown. The older tradition gives him a thousand years. In the *Vendidad* he enlarges the earth by one-third of its space, 'the cattle and mankind and dogs and birds and red burning fire' being after 300 years too crowded. After another 300 years he has to repeat the enlargement. When he has done this three times, that is, after 900 years, the tale passes on to the preparation of the *vāra* for the coming winters. The analogy—300 years after each enlargement—should give us 1200 years. But the author might have imagined a hundred years after the third enlargement for the making of the enclosure, thus keeping the old tradition of a happy age of a thousand years in the old time. The later learned chronological system in *Bāndahishn*, xxxiv. 4, and *Matrōd-4 Kārest*, xxvii. 24, 25, gives 616 years and 6 months.

The Yima legend gives three Ages of the World: the paradise-Age; the present time, which will close with a catastrophe; the frost-demons' win-

* Pliny also mentions another Zarathushtra, who is said to have lived shortly before B.C. 500.

ters, and the restoring of the living world from Yima's *vara*—after the well-known scheme :

' Past and to come seems best ; things present worst ' (2 Henry IV. i. iii. 108).

It is impossible to say whether this system of three Ages ever existed as a theory by itself. But there are several traces of the greater importance of Yima Khshaēta, 'the radiant,' Jamshid in pre-Zarathushtrian legend (cf. Blochet, *Le messianisme dans l'hétérodoxie musulmane*, p. 128 f.). He seems to have been once considered as the first man and the first ruler. For further discussion see Söderblom, *La Vie Future*, 175–187.

(b) The heroic lore of Irân knew a list of heroes and old rulers, which is preserved in the extant parts of the Avesta, especially in the fifth *Yasht*, consecrated to the goddess Ardvî Sîra Anahita, in the dramatic history of the *khwarenah* (the spiritual substance-power of the Iranian kingship), as given in *Yasht*, xiv., and in the ecclesiastical lists of saints of the *Yasht*, xiii. These legends have been, *tant bien que mal*, amalgamated with and adopted into the Zarathushtrian system.

(c) The division of the present millennium into the common Metal Ages is a combination of two systems, of which the Mazdayasnian tradition evidently adopted or borrowed the second one at a later period.

(d) The real existence of mankind from Mâshyâ-Mâshyô until the coming of the Saoshyant comprised only 6000 years,—as in Talmudic and Christian literature (Böklen, *Die Verwandtschaft der jüd.-christl. mit den pers. Eschatologie*, 82–84), where the duration of the world is fixed on the analogy of the six days of creation, a thousand years being with God as one day. Theopompus-Plutarch also seems to reckon 6000 years, but in a different way : 3000 for Ahura Mazda's supremacy (= Gayōmar's trimillennium), and 3000 for the conflict (= until Zarathushtra), the two periods being ended by the final victory and eternal bliss (and the rest of God, which looks like a Jewish-Christian Sabbath of the world ; cf. Ep. Barn. 15).

The last trimillennium, from Zarathushtra to the Saoshyant, of the final Zarathushtrian chronology seems to have been understood by Theopompus as the time of fulfilment, rather than as a new period. It is possible that the doctrine had this aspect earlier. That would better suit the spirit of the *Gâthâs*, where the final renovation of the world seems, in some texts at least, to be soon expected. In any case, Theopompus' record agrees, as to the main contents, with the last 2000 years of the *Bândâishn*. Those 9000 years alone are mentioned in the *Ardâ Vîrâf Nâmâh*, xviii. and liv. : the damned souls complain that they are not delivered from hell although 9000 years have gone—one day or three days in hell seeming to them as long as the whole duration of the world. The author of the *Ardâ Vîrâf Nâmâh* must have known the first trimillennium, as the period of 'the holy spiritual creation' is mentioned in the Avestan fragment Pahl. *Vend.* ii. 20. But it is not unlikely that *Ardâ Vîrâf's* 9000 years, which are to be compared with Theopompus' statement, represent an older chronology containing three parts : (1) a good ruler, (2) the present intermingled state, and (3) the great restoration, corresponding to our reconstruction of the Yima legend. The first of the four great epochs will then have been added in order to get the number four, or the twelve thousand years.

We are not sufficiently acquainted with the old Babylonian divisions of the existence of the world. But probably the 12,000 years of the *Bândâishn*—as well as the same age of the world predicted by Mani (Kessler, *Mani*, i. 348; the number 12 is fundamental in Mani's doctrine, see Kessler, art. 'Mani' in *PRP*), and by the Etrurians (according to Suidas), like the 12 parts of the existence of the world in 2 Es 14¹⁰² and Apoc. Bar 63, are derived from a Babylonian cycle. This probability comes very near demonstration when we remark that both the Etrurian belief, as reported by Suidas, and the *Bândâishn* combine the twelve millenia with the zodiacal signs. The Mazdayasnian theologians owed their astronomical science to the Babylonians and to the Egyptians (J. Marquart, *Philologus*, Sup. x. 1. 192 f.).

(e) The *Gâthâs* represent an epoch in which this doctrine of periods did not belong to the Zarathushtrian faith. If periods were already known in Irân, this must have been outside the Zarathushtrian reform. The long waiting is incompatible with the preaching of the *Gâthâs*. Time, as in both Jewish and Christian prophecy and

apocalypses, is rather sharply divided into two Ages : the present era of struggle and difficulty, and the happy reign of theocracy and justice after the longed-for separation by fire.

4. Meaning of the periods.—The beliefs outlined in the foregoing pages represent the original and characteristic feature of the Mazdayasnian system of Ages of the World, and must be derived from the Zoroastrian idea, expressed in the *Gâthâs*, of Ahura Mazda as the ruler of the future destiny of mankind. The division into Ages does not imply merely a distinction between the present and the old time—as e.g. in the *alcheringa* (wh. see) of the Australians. Nor does it signify a deterioration, as, for example, in the Ages of Hesiod and Ovid. Something resembling a pessimistic view of the course of time might be gathered from three phases of the Mazdayasnian religion : (1) the monster of the old myth will be unfettered ; (2) the sharp opposition implied in the Zarathushtrian reform, and the earnest appeal to choose the way of Asha, sometimes give a dark colouring to the Gâthic view ; (3) several thousand years later, when the glorious line of history was already pointed out by Avestan and Pahlavi theology, the tragic events under the last Sasanians and after the Arabian conquest taught a sombre lesson of the end of Zarathushtra's millennium before the advent of the expected helper, who never came. The four Ages of Gold, Silver, Steel, and Iron were adopted, at first probably by an orthodox compiler, during the early controversies with Manichaeism and other heresies ; then history filled out the Iron-mingled Age in different ways. The Great *Bândâishn* kept open its chapter 'On the calamities which have invaded Irân in different ages' (Blochet, l.c. 45). But the Metal Ages are only episodes in one millennium, and give no idea of the destiny of the world. In both cases the general optimistic character of the Zarathushtrian faith prevails : the victory of Ormazd is the surest thing in the world, known and predicted since the beginning. The worldly corporeal existence and human affairs are no enemies of piety, but pure elements and duties, the diligent fulfilment of which formally constitutes each Mazdayasnian a fellow-worker with Ormazd, a helper, saviour (*saoshyant*), and *frashôcarerâ*, 'a renewer' of humanity and of the world. These functions he discharges in company with the great heroes, from Kai-Khûrâv—without whose destruction of the idolatrous temples behind the lake of Caecasta the renovation of the world could never have been carried out (*Mâinig-i Khrat*, ii. 95)—to the last *saoshyant*. The world is a realm of conflict, where impurity constantly threatens and demons are ever on the watch. But it is a noteworthy fact that the period of confusion and strife is not the *present Age*. That period ended with the appearance of Zarathushtra. We already live in the Age of the victory of Ormazd.

The Persian periods do not imply an eternal repetition, as in the developments of Aryan speculation and religion in India and Greece, and sometimes in modern thought (e.g. Nietzsche, and, in a less pedantic way, Sv. Arrhenius)—the same causes combining to produce in eternal cycles the same effect—

⁴ When this world shall be *former*, underground,
Thrown topsy-turvy, twisted, crisp'd, and curl'd,
Baked, fried, or burnt, turn'd inside-out, or drown'd,
Like all the worlds before, which have been hurl'd
First out of, and then back again to chaos,
The superstratum which will overlay us.'

—(Don Juan, canto ix. stanza xxxvii.).

Nothing can be more characteristic than the placing of the Metal Ages and this Iron Age only in one, the present, Mazdayasnian millennium, while the millennia form together a progress towards an end, whereas in the Indian conception the four

yugas and the present evil *kali* Age form the constant feature of periods which emerge and pass away in endless similarity. The system of periods in Iran did not unite, as in India, with the popular belief in the transmigration of souls—a belief worked out into a fundamental philosophical doctrine in Indian systems of periods.

The Mazdayasian scheme expresses, in a somewhat scholastic way, the idea implied in the word *history*: that is to say, ‘something happens in what happens’ (E. G. Geijer), so that the intricate mass of events has a meaning and a goal beyond the actual combinations and situation. The real kernel of history is a ‘forward,’ not a ‘see-saw,’ and not a ‘backward,’ although it may seem so to human eyes. This profound conception has arisen only twice in the history of human thought—in the only two ancient prophetic religions, one Aryan, one Semitic—in Zarathushtrianism and in Mosaism. Neither seems to have borrowed it from the other. Christianity inherited it from Mosaism, and it has become prevalent in the Western civilization in the form of belief in a Divine purport in history, in progressive evolution, or in a redeeming crisis, and constitutes one of the most significant features and influential factors in the civilization of Europe and America, as distinguished from the great civilizations of India and of the Far East. It is so deeply rooted in the Western mind, that even so sincere and acute an admirer of and believer in the Indian conception as Schopenhauer unconsciously yields to it (cf. his *Sämtliche Werke*, v. 224). To have originated faith in the significance and purpose of history may fittingly be called Zarathushtra’s greatest gift to mankind.

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NATHAN SÖDERBLOM.

AGHORI, AGHORAPANTHI, AUGAR, AUGHAR.—These are names applied to a sect of ascetics in India who have for a long time attracted attention on account of their habit of cannibalism and other abominable practices.

1. *Meaning of name.*—Their name indicates connexion with the cult of Siva, being derived from Skr. *a-ghora*, ‘not terrific,’ one of the euphemistic titles of the god. *Aghorapanthi* means ‘one who follows the path’ (Skr. *panth*) or cult of Siva in this form. The worship of Siva as *Aghorisvara*, ‘the non-terrific Lord,’ is practised at a fine temple at Ikkeri, in Mysore, and in many other places.

2. *Distribution.*—The present distribution of the sect is a question of some difficulty. According to the Census of 1901, they number within the Empire 5580, of whom the vast majority (5185) are found in Bihar or W. Bengal, the remainder in Ajmir-Mhairwāra and Berār, with 2 convicts in the Andaman Islands. This differs widely from the Census figures of 1891, when 630 Aghori and 4317 Augars were recorded in the United Provinces, 3877 Aghori in Bengal, and 436 Augars in the Panjab. The explanation of this discrepancy lies partly in the fact that, like all ascetics of the kind, they are constantly wandering from one part of the country to another to attend bathing fairs and visit places of pilgrimage. Secondly, the unpopu-

larity of the sect doubtless induces them at the time of the Census to record themselves under other and more reputable titles. The chief centres of the sect, where a monastery (*matha*) of some kind was assigned to them, used in former times to be Mount Ābu, Girnār, Bodh Gayā, Benares, and Hinglāj—the last the most western point to which Indian polytheism extends. But they have now disappeared from Mount Ābu, and they seem to have no recognized establishments at any of the other holy places, which, however, they still occasionally visit.*

3. *History of the sect.*—The first account of ascetics following the rule of the modern Aghori is found in the *Travels* of the Buddhist pilgrim, Hiuen Tsiang. He speaks of ‘naked ascetics, and others who cover themselves with ashes, and some who make chaplets of bones, which they wear as crowns on their heads’ (Beal, *Si-yu-ki, Buddhist Records of the W. World*, i. 55; Watters, *Yuan Chwang’s Travels in India*, i. 123). In another passage he speaks of the Kāpāladrī, or ‘wearers of skulls,’ some of whom have no clothes, ‘but go naked (*nirgranthas*); some wear leaf or bark garments’ (Beal, *op. cit.* i. 76; Watters, *op. cit.* i. 149). When we come to later times, we have more particular accounts of these Kāpālika or Kāpāladrī (Skr. *kāpāla*, ‘a skull,’ *dhārin*, ‘carrying’). Anandagiri, in his *Saṅkara-vijaya*, thus describes the Kāpālika: ‘His body is smeared with ashes from a funeral pile, around his neck hangs a string of human skulls, his forehead is streaked with a black line, his hair is woven into the matted braid, his loins are clothed with a tiger’s skin, a hollow skull is in his left hand (for a cup), and in his right hand he carries a bell, which he rings incessantly, exclaiming aloud, “Ho Sambhu, Bhairava, ho lord of Kāli!” titles of Siva’ (H. H. Wilson, *Essays*, i. 264 n.). Again, the poet Bhavabhūti, who wrote in the first half of the 8th cent. A.D., in his drama *Mālatī and Mādhava*, Act v., gives a vivid account of the rescue by Mādhava of his mistress from the clutches of the Aghora Ghāṇṭa, who is about to sacrifice her at the altar of the goddess Chāmūndā, who represents Devī in one of her most terrible forms. Within the temple the human-sacrificing priest circles in his Tantric dance round his victims, while he invokes the goddess, round whose neck is a garland of human skulls (Wilson, *Theatre of the Hindus*, ii. 55; Frazer, *Lit. Hist. of India*, 289 f.). A vivid description of this Kāpālika-vrata, or worship of the terrific forms of Siva and his consort Durgā, is given in the *Prabodha Chandrodaya*, or ‘Moon of Intellect’ (Eng. tr. J. Taylor, 38 f.). In the *Dabistān* (Eng. tr. Shea-Troyer, ii. 129), the author of which died about 1670, we have an account of the ‘sect of the Yogis, who know no prohibited food. . . . They also kill and eat men. . . . There are some of this sect who, having mixed their excretions and filtered them through a piece of cloth, drink them, and say that such an act renders a man capable of great affairs, and they pretend to know strange things. They call the performance of this act *Atīlia* and also *Akhori*. They have all originated from Gorakhnāth. The author of this work saw a man, who, singing the customary song, sat upon a corpse, which he kept unburied until it came into a state of dissolution, and then ate the flesh of it; this act they hold extremely meritorious.’ Gorakhnāth is the great mediaeval Hindu saint, of whom many

* Havell, in 1905, found an Augar at Benares seated in a stone cell raised high above the burning-ghāt. The sect still maintains here its evil reputation, but this black-robed ascetic, who is shown in the photograph studying a sacred book, proved to be quite inoffensive. He bestowed his blessing upon the prying tourist, but contemptuously refused to accept a present (*Benares, The Sacred City*, 119 f.).